# A SECOND COURSE

OF OF

# CALISTHENIC EXERCISES;

WITH A COURSE OF

PRIVATE GYMNASTICS

FOR GENTLEMEN.

BY SIGNOR VOARINO.

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OF

# CALISTHENIC EXERCISES,

 $\mathbf{B}\mathbf{Y}$ 

SIGNOR VOARINO.

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# SECOND COURSE

OF

## CALISTHENIC EXERCISES;

WITH

#### A COURSE

OF

## PRIVATE GYMNASTICS

FOR GENTLEMEN;

ACCOMPANIED WITH A FEW OBSERVATIONS

ON

# THE UTILITY OF EXERCISE.

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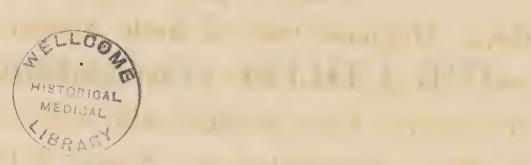
#### SIGNOR VOARINO.

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#### HER ROYAL HIGHNESS

# THE DUCHESS OF CLARENCE,

(WITH HER ROYAL PERMISSION.)

MADAM,

Royal Highness takes a lively interest in every thing that tends to the amelioration of mankind, I am inspired with confidence to offer to your protection a System of Physical Exercises, the object of which is, to counteract the baneful, and too frequently fatal effects resulting from the restraint which education and habit imposes upon the female figure in the higher ranks of society; a System which has obtained the sanction of men the most eminent in the medical profession, from the success which has already attended its practice.

The advantages of exercise have hitherto belonged too exclusively to gentlemen; but the discernment of your Royal Highness will readily perceive that physical exercises are of equal, if not superior, importance to females, in laying that solid foundation of health which every philanthropic mind would be anxious to transmit to posterity. Nor is this the only, although the highest advantage effected by these Exercises; as, while they strengthen a constitution naturally weak, and remove any tendency to personal deformity, they impart that elasticity and grace which give an indescribable charm to the female form and carriage. In the composition of my Work, I have, I hope, paid so strict an attention to decorum, as to remove the objections of the most delicate or fastidious.

Condescend, Madam, to regard with approbation my efforts to introduce this Course of Exercises, as I feel convinced, that the gracious protection of your Royal Highness would infallibly ensure its popularity and success.

Pardon, Madam, the liberty I have taken, in thus presuming to address your Royal Highness, and permit me to subscribe myself, with the most profound respect,

MADAM,

Your Royal Highness's

Very obedient and humble servant,

G. P. VOARINO.

## ADVERTISEMENT.

It is the wish of the Author of the Introduction to Calisthenic Exercises, arranged for the Private Tuition of Ladies, to make himself still further useful to the female branches of society, who are willing to embrace the opportunity of adopting the system which he particularly recommends in his former work; and presuming, at the same time, that much benefit may be derived from their being acquainted with his ideas on this subject, which particularly recommend the use of Calisthenics, and which are so essential in the removal of the various weaknesses incidental to a sedentary mode of life, he has lost no time in fulfilling the task which he. had long time since imposed on himself; and having, during many years' experience and observation, witnessed the various disorders of which many an interesting female has been cured, after pursuing

the exercises for some time under his tuition; he has treated, in the following pages, on the disorders which most frequently affect females, and on the means which he considers the most effectual to restore them at once to health and happiness.

Nov. 29, 1827.

## INTRODUCTION.

The introduction of Gymnastic Exercises into the system of education, will constitute a remarkable epoch in the annals of history. The social order has long claimed securities which the real interest of nations will no longer admit of being deferred, as these are not only laws, but institutions, which reason and the wants of the age imperiously demand.

The great objects of exercise, during infancy and youth, are, to promote the growth and strength of the body, and to render the feelings, both external and internal, more acute. The games and diversions of children, therefore, as Locke has well observed, should be directed towards good and useful habits, and against the introduction of bad ones. Nature has implanted in young persons an earnest desire to romp, to run, to wrestle, and to use other active bodily exercises. The construction of the human body proves, indeed, that exercise is its natural state.

Exercise is even more necessary, in the early stages of life, than attention to the mental branches of education. It is astonishing how many perish by what Salzmann calls, "the disease of education." Multitudes die every year of this disorder.

According to Rousseau, the grand secret of education is,

that the exercise of the body, and that of the mind, should be so continued as always to serve as a relaxation from each other.

The exercises of youth should promote the circulation of the blood, and strengthen the nerves and muscles; they should accustom the body to a variety of positions, and render it adroit and agile; they should inspire presence of mind, and excite and cherish activity; and by them, not only personal strength and mental energy, but also the beauty of the form should be promoted. Salzmann observes, in his "Gymnastics for Youth," (p. 187) that, by the forcible respiration which exercise induces, narrowness of the chest, which is so injurious to the lungs, may be prevented.

On the subject of agreeable exercises in general, it has been justly mentioned as a subject of regret, that these, and the Calisthenic Diversions and Exercises, are now so little practised. Such pastimes make people take more exercise than they would otherwise, and are of the greatest service to those who are not under the necessity of labouring for their support. As active diversions lose ground, those of a sedentary kind seem to prevail; the latter, however, are of no other use than to consume time. Instead of relieving the mind, they often require more thought than either study or business. Buchan, in his "Domestic Medicine," (p. 79) says, that every thing which induces young persons to sit still, unless it be necessary employment, ought to be avoided. The ancients, in general, had so high an opinion of Gymnastics, that Plato and Aristotle, and other authorities, considered a commonwealth as defective in which they were neglected; and they reasoned thus: -As the improvement of the mind, which ought to be our constant aim, cannot be accomplished without the aid of the body, is it not incumbent on us to promote the health and strength of the one,

that it may be capable of serving the other? Hence, Plato, in "Protagoras," calls him a cripple, who, cultivating his mind alone, suffered his body to languish through inactivity and sloth.

THE ADVANTAGES OF EXERCISE, IN PREVENTING OR CURING DISEASES.

It has been justly observed, that if only some of the many advantages resulting from exercise, were to be procured by any one medicine, nothing in the world would be in so much esteem, or more anxiously sought after; but we slight the advantages which are to be procured by other means than medicine, when they cannot be obtained without trouble. Hence exercise is neglected, though, by attending to it, many of those disorders to which mankind often fall a sacrifice, might, in a great measure, be prevented.

There was a time, we are told, when diseases were little known, when age was the only infirmity, and death the sole physician. That could only be the case, when men, 1st, By labour, or abundant exercise, promoted a regular and complete circulation of their blood; 2ndly, By great exertion, freed their bodies from impurities; and, 3rdly, By constant exposure to the open air, were hardened against the change of the seasons, and suffered no inconvenience from them. By such means as these, we might consider ourselves completely secured against three-fourths of the usual catalogue of diseases.

1st. The necessity of labour or exercise to promote the regular and complete circulation of the blood, is evident from this circumstance, that the strength of the heart and arteries alone, in a sedentary course of life, are by no means sufficient to keep up and perpetuate, with sufficient efficacy,

that circulation throughout the smaller blood-vessels. The assistance and combined force of all the muscles of the body, acting at proper intervals, are essential for that purpose. Without this extraordinary aid, which can only be procured by exercise, the smaller vessels are, in process of time, choked, and the delicate springs of our frail machines lose their activity, and become enervated; whence numberless evils of the chronic kind, and every species of nervous disorders, take their origin.

Cadogan, in his "Dissertation on the Gout," says, that the principal source of our well-being arises from the circulation of our fluids, especially the blood. A brisk circulation animates the whole man. Even a phlegmatic person is exhilirated when any thing puts his blood in motion; and when this takes place in an immoderate degree, the man is agitated even to delirium. These effects are well known. Continued rest weakens the circulation, till at length the blood feebly creeps through its vessels; for the heart is not of itself sufficient to give it due impulse: and to accomplish this, muscular movement is likewise requisite. Rest of the body relaxes the muscles, diminishes the vital heat, checks perspiration, injures digestion, sickens the whole frame, and thus numberless diseases are introduced. There is not a single part of the human machine which a sedentary mode of life does not debilitate, but the nerves more especially suffer from it. Generally speaking, says Ackerman, a sedentary life is the source of all those diseases which physicians call cachectic, the number of which is considerable. Among them are jaundice, atrophy, worms, tetter, obstruction of the natural secretions, dropsy, &c.; for these, exercise, (and particularly that taken by means of the Calisthenic Exercises) is the best remedy, and can never be too much recommended to females in whom the slightest tendency to such disorders is perceptible; it strengthens the vessels,

preserves the fluids in a healthy state, and strengthens all the The cordials, volatiles, bracers, strengtheners, vital powers. given by common practitioners for this purpose, will keep up an increased circulation for a few hours; but their action soon subsides, the stimulus ceases, and they must be repeated, and continued during life. The circulation of the blood, indeed, can only be properly carried on through the medium of exercise or labour. No art can ever come equal to nature in this most salutary of all her operations. sprightly vigour and alacrity of health, which we feel and enjoy in an active course of life,—that zest of appetite and refreshment after eating, which sated luxury seeks in vain from art, is entirely owing to new blood, made each day from fresh food, prepared and distributed by the joint action of all parts of the body.

2ndly. Not only must the blood be duly circulated, but it must also be cleared from impurities; and this can only be effected by exercise, under a coarse, and perhaps even under an unwholesome regimen. By exercise the digestive powers are strengthened, and by perspiration, the acrid humours are dissipated, which, when retained in the blood, occasion obstructions and many other disorders.

There are no means by which health can be more effectually secured than by accustoming the body to be duly exercised, and the muscles properly and regularly exerted. Indeed, the advantages resulting from a continued course of Female Gymnastic, or Calisthenic Exercises, cannot be too highly appreciated. The indolent may be compared to rusty machines, which are soon corroded and destroyed, whereas the active (though they also must ultimately perish), may be said to be always bright and polished, and constantly ready to fulfil any purpose for which they were destined.

It has been observed, that what are called liver complaints, and other glandular obstructions, are much more frequent

now than formerly. This is chiefly owing to inactivity; and nothing but exercise can prevent them. So long as the liver, the kidneys, and other glands of the body, duly perform their respective functions, health is seldom impaired; but when they fail, nothing can restore it.

Not only is the necessity of exercise in general to be enforced, but particular exercises will be found to be admirably calculated for the prevention of particular diseases to which females have a tendency. With regard to nervous complaints in particular, nothing but exercise can brace and strengthen the nerves, or prevent the endless train of diseases which proceed from a relaxed state of the organs. Persons with feeble arms, weak hips, and weak backs, are earnestly recommended the use of *Calisthenic Exercises*, as the surest means of imparting to them the proper degree of strength necessary to perform with ease and facility the various functions allotted to them. We seldom hear the active or laborious complain of nervous diseases;—these are reserved for the sons of ease and affluence.

It is further to be observed, that the more luxuriously any individual lives, the more he requires exercise; and that not only of the passive, or even of the active, but also of the violent kind. It is impossible that he can otherwise preserve his health, and at the same time indulge in luxurious gratifications. To persons in such a sphere of life, the subject of exercise is of peculiar importance, and requires the most exact attention. Indeed, the poor countryman has no just ground to complain of the extent of his labour, or the hardness of his fate; for he enjoys a thousand times more real happiness than the inhabitant of the gilded palace, who rolls in luxury, and who, for want of labour or exercise, is courted in vain by every enticement to repose.

The effect of want of bodily exercise upon the mind, is a circumstance well entitled to peculiar attention. Bad health,

so often resulting therefrom, may, as Kotzebue observes, extinguish the divine flame of genius; and it can hardly be doubted, that if the body labours under disorder, the mind will be unable to achieve any thing that is great and noble.

If any thing can rouse an anxiety in favour of regular exercise, and its due application, it must be the effect it had on two of the most celebrated characters of ancient times, Cicero and Cæsar, who, without the advantage of a close attention to exercise, might have perished, unknown and disregarded.

Cicero is described by Plutarch as being, at one period of his life, extremely thin and slender, and having such a weakness in his stomach, that he could eat but little, and that not till late in the evening. He travelled to Athens, however, for the recovery of his health, where his body was so strengthened by Gymnastic Exercises, as to become firm and robust; and his voice, which had been harsh, was thoroughly formed, and rendered sweet, full, and sonorous \*.

And of Julius Cæsar, the same author informs us, that he was originally of a slender habit of body, had a soft and white skin, was troubled with pains in his head, and was subject to epilepsy; but, influenced by the example of Cicero, and a great many others of his contemporaries, he found in those exercises, the best medicine for his indisposition, as after them he went through long marches, bore coarse diet, frequent sleeping in the fields, and continued exposed to the hardships of war.

With such examples before us, who would not be animated to take exercise, particularly that communicated to the body by means of Gymnastics, without which Cicero might never have triumphed at the bar, nor Cæsar in the field? It is absurd to imagine, that a due attention to

<sup>\*</sup> See Plutarch's Life of Cicero.

exercise requires too much time, and is inconsistent with elevated situations, or literary fame. By whom were greater actions performed, and works more conspicuous for mental ability written, than by the two distinguished characters above alluded to? and yet they were cut off at an earlier period than nature intended.

EXERCISE CURES DISEASES WITHOUT THE AID OF MEDICINE.

There can be no doubt that exercise, communicated to the whole frame by means of Calisthenic Exercises, is highly efficacious in many disorders; and Hoffman, in a special treatise on that subject, justly celebrates it as the best of medicine; and a celebrated poet (Dryden) asserts, that,

"The wise, for cure, on exercise depend:
God never made his work for man to mend."

There are many instances recorded, in ancient authors, of the great efficacy of Gymnastic Exercises in the cure of diseases. Plato tells us, that Herodicus was cured of the hypochondriacal disease by that means. Pausanias relates, that Hysmoneus was relieved from great weakness of nerves, by addicting himself to similar exercises, and thereby acquired such a degree of vigour as to obtain many prizes at the Olympic Games: and Plutarch says, that Laomedon was so perfectly cured of an obstinate disease by the practice of Gymnastics, as to excel in running.

As females are no less subject to hypochondriacal affections than men, and still more to weakness of the nervous system, owing to the difference of the habits in which they are educated from their childhood, and to a train of disorders

incident to the sex, it becomes necessary (if not more so, in order to counteract the effects of those maladies, and to lay the foundation of sound health) that they should, at an early period, supply the want of that exercise which the male part of the community is accustomed to take, by those exercises which we term *Calisthenic*, as they are better adapted to the natural delicacy of their frame and constitution. They may thus avoid those evils which, in maturer age, so often prove fatal to themselves, and frequently to their progeny, it being impossible for the offspring of an unhealthy mother to enjoy strength and vigour of constitution.

Females of the higher order of society, being subject to a variety of complaints from which the lower classes are (owing to the exercise their situation compels them to take) generally free, it is to them, in particular, we recommend those exercises, as the most effectual means of preventing or removing whatever tendency there may be in their constitution to the disorders alluded to.

In many branches of medicine, the ancients were certainly inferior to the moderns; but they treated diseases with great success, for they applied themselves, with extraordinary diligence, to acquire a thorough knowledge of the symptoms of every disorder; and called in the aid of corporeal exercises, by means of which they supplied what was wanting in other remedies. Herodicus, in particular, is said to have carried Gymnastic Medicine to such a height, as to have actually applied a particular kind of exercise to each disease:

The particular diseases, in the cure of which Gymnastic Exercises have been found the most effectual, are:—1. The Gout; 2. The Rheumatism; 3. Consumption; 4. Nervous Disorders; 5. The Bilious Cholic; 6. The Dropsy; 7. The

Palsy; 8. Diseases of the Mind:—besides many other disorders.

- 1. The Gout.—Sydenham affirms, that nothing so effectually prevents that disorder of the humours (which he considers to be the principal cause of the gout), and consequently strengthens so much the fluids and solids, as exercise. But as there is more necessity for making a thorough change in the constitution in the gout than in any other chronic disease, so exercise, unless it be used daily, will be of no service, and perhaps may do mischief, by causing a fit, if resorted to after it has been abandoned for a considerable space of time. Indeed, if exercise be omitted, all the remedies which have hitherto been discovered will be of little avail. The exercise, however, should be moderate, because, if violent, aged persons, who are chiefly subject to the gout, have their spirits too much wasted, and their digestive powers are injured, which regular and gentle exercise would strengthen.
- 2. Rheumatism.—The beneficial effects of Gymnastic Exercises in chronic rheumatism, more particularly in the sciatica, has recently been ascertained in a most satisfactory manner. After every other remedy had been tried in vain, several ladies, who had for a long time been afflicted with that disorder, resolved to try the effects of Calisthenic Exercises; the consequence was, that after having persevered in them for several months, they were effectually cured, their appetite increased, their general health improved, and they became less sensible of cold, or of variation of temperature.
- 3. Consumption.—In most chronic diseases, but especially in consumption, exercise has given relief, in a manner almost incredible. A gentleman, whose son was troubled with pains in his left side, and seemed to be threatened with

a consumption, if it had not actually begun, thought that it might be owing to want of exercise, and prevailed on him to try the *Gymnastic Exercises*. He began these Exercises at about twelve years of age, and continued them about a twelvementh, when they became no longer necessary, as his health was perfectly re-established, and all tendency to consumption removed \*.

- 4. Nervous Disorders.—Nothing can surpass the efficacy of exercise in nervous disorders. As the labouring classes of the community are seldom afflicted with these, it was natural to suppose that a resolute course of exercise would be an effectual remedy. Many have been cured by persevering in it; indeed, before they had practised it many days, the complaints of several have been removed.
- 5. The Bilious Cholic.—Sydenham found no remedy so effectual in this disorder as exercise. By it, the morbific matter is brought to the habit of the body; and the blood, broken and divided by continual motion, undergoes, as it were, a new depuration. The bowels, also, are greatly strengthened and refreshed by this mode of rousing the natural heat.
- 6. The Dropsy.—There is a species of the dropsy, of the anasarcus kind, for which exercise is an effectual remedy. The ancients, it would appear, relied much on exercise for the cure of this complaint; and it is a system which ought more to be attended to in modern times than we find is the case †.
- 7. The Palsy.—A person threatened with the palsy, was ordered to take a journey to Bath for a cure. In going down, he thought he would try the effect of walking,

<sup>\*</sup> It is proper to observe, that the chest became much broader than probably it otherwise would have been, in consequence of those exercises.

<sup>†</sup> This subject is very fully treated of in Fuller's "Medicina Gymnastica," p. 107 and 225.

having it always in his power to get into his carriage when he was fatigued; but he derived so much benefit from the exercise he thus took, that he was cured of the disorder before he reached Bath. The reader may consult Fuller's "Medicina Gymnastica," (p. 482) where there are other facts regarding the cure of palsy by vigorous exercise. At the same time, in most cases of threatened apoplexy, exercise cannot be recommended.

8. Diseases of the Mind. — The celebrated Hoffman cured idiotism by exercise; and, according to Descartes, the mind depends so much on the constitution, and state of the bodily organs, that if any means of increasing sagacity were to be found, they must necessarily be sought for in the art of medicine, accompanied by a due proportion of exercise. A well-framed and well-exercised body is precisely what facilitates and secures the proper performance of the mental functions; and a healthy organization of the bodily powers, is the best foundation for that noble endowment, known under the name of common sense (however uncommon, in fact, it is), or a sound understanding.

A number of cures, in various other disorders, have been performed by exercise, even carried to fatigue. An eminent physician, a friend of the writer's, has collected several cases, in which it has been of the highest service, not only in the complaints already mentioned, but also in nervous pains of the stomach, in vapourish languor and fever, in doubtful and difficult recovery.

With regard to the choice of exercise for curing diseases, it has been justly remarked, that there are many points to be attended to. Every kind of exercise, and every degree of it, is not fit for every constitution; far less in every complaint, or at all times. Which is the proper sort of exercise to be recommended, must depend upon particular circumstances of habit, age, constitution, or disorder; and, in cases

of disease, the advice of an intelligent physician is not to be neglected.

Exercise is well entitled, in various respects, to be considered as "a common aid to physic," to use a phrase which Asclepiades originally used. In fact, when the body is, by exercise, brought into a good state of health, and all the humours are wholesome, should it be attacked by disease, it will be the more easily restored. Hence it is well observed, that we ought, undoubtedly, to attribute the wonderful success of the ancient physicians in curing diseases with such indifferent materials as their pharmacy afforded, to the patient having his blood in general pure, and his body healthy, by an attention to exercise\*.

It is to be observed, that exercise is to physic what a bandage is to surgery, an assistance or medium, without which, many other prescriptions, however excellent, will not succeed. The virtue of some medicines is increased by means of exercise, while, in others, exercise is only necessary to remove some inconvenience attending their operation, which is often so great as to deter people from using them so liberally as they ought. Thus, medicines of balsamic and chalybeate nature, are not likely to answer the purposes for which they were intended, unless they are accompanied with exercise; and if exercise is omitted in the case of persons afflicted with rheumatism, all the other remedies which have hitherto been discovered will be of little avail †.

It is further to be remarked, that, by means of the

<sup>\*</sup> A body duly exercised in the open air, if attacked by any toil or sickness, is not soon affected by it, or easily subdued, the inward parts being all sound and in good condition, and the outward so well fortified against external attacks, as not easily to receive any injury from the impression either of cold or heat. See Lucian's "Dialogue of Gymnastic Exercises," translated in West's Dissertations, p. 171.

<sup>†</sup> See "The best Method of preserving Health," p. 138.

invigorating power of exercise, the efficacy of medicine is increased, and extended to every part of the system.

This subject may be concluded with the advice of an elegant poet, and which cannot be too strongly recommended to the attention of every individual to whom health is an object.

"Toil, and be strong." By toil, the flaccid nerves Grow firm, and gain a more compacted tone; The greener juices are by toil subdu'd, Mellow'd, and subtiliz'd; the vapid old Expell'd, and all the rancour of the blood \*."

\* See Armstrong's "Art of preserving Health," book iii. line 39.

## CALISTHENIC EXERCISES.

#### INTRODUCTION.

In presenting a second course of Calisthenic Exercises to the notice of the public, little is required to be said. The favourable reception which the first has met, induces the Author to believe that these Exercises have been found beneficial to those who have practised them; to those, therefore, nothing need be urged. To those who have not practised them, the example of the former will be a much more powerful recommendation than any which propriety would allow the Author to give. It will be merely necessary to observe, that Exercises of the Hoop have here been introduced. These, it is hoped, will verify the experience of the Author in communicating grace and flexibility to the shoulders. If so, their object will be attained.

Preliminary Observations on the simple and complicated Exercises of the Arms and Legs.

The first Exercises, called exercises of the arms and legs, have for their object the gradual development of the muscles of the superior and inferior extremities, in order to give them strength and pliability. It is, therefore, necessary that the pupils should become expert in the performance of

them before they attempt others of a more complicated nature, which cannot be successfully practised without attaining a certain degree of proficiency in the simple ones. As the benefit to be derived by the superior and inferior extremities from those exercises will afterwards be extended over the whole frame, the most particular attention must be paid, by the pupils, to observe the greatest precision in the execution of them, by which they will be more easily enabled to proceed to the succeeding ones, which are those of the Cane and Triangle.

The Exercises of the Cane, are intended to remove any tendency to stiffness in the muscles of the neck, shoulders, and chest; and correct any natural or habitual defect of those parts, by imparting to them a graceful firmness and elasticity.

Those of the Triangle, are calculated to give to the frame in general every degree of activity, suppleness, and solidity necessary for whatever motions the body may require.

# Observations on the Second Course of Exercises, executed by means of the Hoop.

The encouragement which the Author's former Treatise on Calisthenic Exercises met with, and the warm approbation bestowed upon it by the most eminent of the faculty, has induced him to make considerable additions; under its present form, he hopes he has succeeded in forming a complete system.

In these Exercises, every attention has been

paid to decorum, at the same time nothing has been neglected to ensure a full development of all the physical powers.

As the Exercises of the Hoop are performed on each leg alternately, and sometimes on both, they will be found of infinite service in giving the body a perfect equilibrium, calculated to correct any irregularity in walking, and materially improve its general carriage and deportment.

N. B.—Those who may wish to receive lessons in Calisthenic, or Gymnastic Exercises, will have the goodness to address their communications to Signor Voarino, at the *Italian Library*, No. 20, *Berners Street*, Oxford Street.

#### EXERCISES OF THE HOOP.

At the commencement of this second course of Calisthenics, I publish several new exercises, which are to be performed with a hoop, made of wood, enveloped in cotton, and covered with ribbon. The size of the hoop must be proportioned to the length of the pupil's arms; its circumference must be round, and about an inch in diameter. I describe these exercises, because I have always found them extremely useful in affording grace and elegance to the upper part of the body, and giving at the same time an extraordinary degree of pliancy to the shoulders.

First Exercise.—The pupil, standing with her heels in a line, holding the hoop in both hands, with the arms extended, the nails in front and the thumbs

at the back of the hoop, must raise it to the height of the shoulders, bending the arms and elbows, turn it between the arms and the body, and carry it behind, to touch the shoulders, extending the arms upwards; the pupil must bring the hoop to the front again in the same way, turn it between the hands, keeping the arms extended, lower it, and reassume her first position.—See Plate I. fig. 1.

Second Exercise.—The pupil, placed as in the first exercise, must turn the hoop between the arms and the body in raising it to touch the shoulders, the arms extended, the left resting against the head, the right bent, and the hoop carried under it, the fore arm resting upon the hoop, without altering the position of the hands; the pupil must then extend the left arm to the left, raising the right shoulder as high as possible, bring the elbow out of the hoop, and return with the arms extended. This exercise is then to be performed on the left side; and the pupil must remember that the arm which she rests against her head must always be held straight.—See Plate I. fig. 2.

Third Exercise.—The pupil, placed with the hoop in both hands, must raise her right arm, pass the hoop over her head, and place it under her right arm-pit, resting the fore arm upon it, the left arm must be extended upwards, and the hoop brought from under the right, by lowering the left, and raising as high as possible the right shoulder; it must then be carried by the left arm, under the left arm-pit, the fore arm resting upon it, the right arm must

be extended upwards, and held close to the head, the hoop is to be brought from under the left arm, by extending both arms, and resting the hoop against the shoulders; the hoop must then be turned between the hands, which will bring the pupil to the first position. This exercise must be repeated, beginning with the other arm.—See Plate I. fig. 3.

Fourth Exercise.—The pupil, standing with the hoop in her hands, must raise her arms, pass it over her head, and rest it upon and against the left shoulder, the left arm must be extended downwards, and the right horizontally in front, the right arm is then to be raised, and the left brought in front; the hoop is then to be turned round the shoulders, and the arms extended in lowering it to rest upon the left shoulder. The pupil must then extend the arms, bring the hoop to the shoulders, and lower it in front. This exercise must be repeated, beginning with the right shoulder.—See Plate I. fig. 4.

Fifth Exercise.—The pupil, placed with the hoop in her hands, having the arms extended, must turn it in, passing it over her head, and raise it to touch the shoulders; she must then bend the left arm, and lower the extended right one, the left then ascends extended, the right doubled, with the hand against the back, ascends also; then, in stretching out the right arm, and raising the left, the hoop must be lowered in front, extending the arms. This exercise must then be performed with the left shoulder; and the pupil must take care to do it very slowly.—See Plate I. fig. 5.

Sixth Exercise.—The pupil, standing in the hoop, must take hold of it with one hand on each side, raise the arms, keeping the elbows bent, and pass it over her head, beginning with the left side; she must then bring it in front, extending the arms, repass it over the left shoulder, and return with the arms extended, and the hoop touching the shoulders; it must then be lowered, and the pupil will find herself in the first position. This exercise is to be repeated, beginning with the right shoulder; and great attention must be paid to perform it with the arms elevated.—See Plate I. fig. 6.

Seventh Exercise.—The pupil, placed with her hands close together on the hoop, touching the toes with one extremity, and having the arms extended, must raise it by bending the arms and elevating the elbow to the height of the shoulder, and turn it over her head; the arms must then be extended in front, and the heels touched by the hoop; it must then be passed to the front again by the same means. pupil must then raise her arms, pass the hoop over her shoulders, beginning with the left, and extend her arms; the hoop is then to be raised to the right and lowered in front. This exercise must be repeated several times; and great attention must be paid to perform it with the elbows raised.—See Plate I. fig. 7.

Eighth Exercise.—The pupil, placed with the hoop in her hands, must raise her arms, pass the hoop over her head, beginning with the left shoulder, extend the arms and bring the hoop to touch the

shoulders; she must then bend the left arm and lower the hoop with the right, and extend the arms; the pupil must then bend the right arm, raise the hoop, pass it over the head, and again touch the shoulders with it; the arms are then to be extended, and the hoop restored to its first position. This exercise must be performed again, beginning with the right arm.—See Plate I. fig. 8.

Ninth Exercise.—The pupil, holding the hoop with both hands, under the left arm-pit, and having the right arm half extended, with the elbow against the body, the left hand placed under the right, and the elbow against the body, must bring it from under the left arm-pit with the right arm, turning it in the two hands; then engaging it with the left arm, she must raise her elbow, turn the hoop between her hands, keeping the arms extended, and it will return to its former place; the pupil must then change the arm without letting go of the hoop, and repeat the exercise, observing to raise the elbow as high as possible.—See Plate I. fig. 9.

Tenth Exercise.—The pupil, placed with the hoop in her hands close together, and having the arms extended, must pass it over her head without bending them, and allow it to descend to touch the back; she must then turn it against and between the hands, beginning with the right, and turn it forwards; it is then to be placed under the left arm-pit, with the elbow against it, and the arm bent; the right arm must be extended upwards to its full length, and the hoop lowered in front. This exercise must be

repeated, beginning with the left arm; the pupil must return to the first position, by lowering the hoop with the arms extended.—See plate I. fig. 10.

#### EXERCISES OF THE HOOP,

COMPLICATED IN PLACE.

First Exercise.—The pupil, being placed with her heels in a line, holding the hoop with both hands, must turn it between her arms, bringing at the same time the right foot forward, and bending the knee, keeping the left extended; she must place the hoop against her shoulders, stretching her arms to their full length; she must again turn the hoop between her arms, and place it against her shoulders, putting her right foot back at the same time in a line with the left, and repeat the same exercise with the left foot before, taking care to hold the body erect and the head up.

Second Exercise.—The pupil, being placed as in the first exercise, must turn the hoop between her arms and body over her head, and placing it against her shoulders she must slide it under her right arm, and bring her left against her head; she must at the same time step to the right, with the right foot, bend the knee, and extend the left leg, take the hoop from under her arm, by raising her elbow. She must place her right heel again in a line with her left, and repeat the same exercise with the left by

taking care to raise the elbow as high as possible in these two movements.

Third Exercise.—The pupil, taking hold of the hoop with both hands, must raise her right arm, pass the hoop over her head, and place it under her left shoulder, stretching her right arm, bending her left, and putting her elbow against the hoop; she must then raise her elbow, take the hoop from under her arm, and in bending her right arm place it under it, at the same time step to the right with the right foot, and stretching the left arm, and bending the right, on the hoop, pass it from under her shoulder, by raising the left arm, pass it over the left shoulder, stretch her arms, and place it against the shoulders, bring back the right foot in a line with the left, and lower the hoop. The pupil must repeat the same movement with the left arm and foot, and take care to raise the shoulders as high as possible in these movements.

Fourth Exercise.—The pupil, standing with the hoop in her hands, must raise her arms, pass it over her head, and rest it upon and against the left shoulder; the left arm must be extended downwards, and the right horizontally in front; the right foot must at the same time be carried behind, touching the ground with the toes; the right arm is then to be raised, and the hoop to be turned round the shoulders and lowered to the right, the right foot being before, and the left arm extended; the hoop must then be passed over the head, as before, and lowered to the left, passing over the right shoulder. The pupil must then place the hoop against her shoulders, stretching her

arms, and lower it again in front. This exercise must be repeated beginning with the right arm and foot, and in turning the hoop the arms must be extended.

Fifth Exercise.—The pupil, placed with the hoop in her hands, must step back with the right foot, touching the ground with the toes, at the same time she must turn the hoop in passing it over her head and bring it against the shoulders; she must then bend the left arm and lower the extended right, the right foot must be brought forward, the left arm then ascends extended, the right, doubled with the hand against the back, is brought forward in passing the hoop over the right shoulder; it must then be carried to the left, placed against the shoulders, and lowered before. The pupil must repeat the exercise, with the right arm and foot, taking care to bring the arm which is bent completely behind the head.

Sixth Exercise.—The pupil, standing in the hoop, must take hold of it with one hand on each side, raise the arms, keeping the elbows bent, and pass it over her head beginning with the left side, the right foot must be carried behind, and the hoop turned round, and repassed over the head (beginning with the left shoulder), the arms extended, the right foot must at the same time be brought forward, and the hoop again passed over the head and turned before, then placed against the shoulders, the arms extended, the feet in a line; then lower the hoop. This exercise must be repeated, beginning with the right shoulder and left foot, and great attention must be paid to raise the elbows as high as possible.

Seventh Exercise.—The pupil, placed with her hands close together on the hoop, touching the toes with one extremity, and having the arms extended, must raise it by bending the arms and elevating the elbow to the height of the shoulder, turn it over her head, and bring the right foot forward; the arms must then be extended, the hoop raised, passed, and repassed over the left shoulder, the right foot in a line with the left, the hoop placed against the shoulders, and then lowered in front. This exercise must be repeated, beginning with the left arm and foot, and great care must be taken to raise the shoulders as high as possible.

Eighth Exercise.—The pupil, placed with the hoop in her hands, must raise her arms, and pass it over her head, beginning with the left shoulder, bringing the right foot forward at the same time; she must then pass the hoop behind her head, and lower it to the right, both arms bent, and place the right foot behind; both arms must then be extended, and the hoop raised in bending them, passed to the right, placed behind the shoulders, and then lowered. The pupil must repeat this exercise, beginning with the left foot and right shoulder, and, as it is rather difficult, she must perform it slowly, and take care to bend the arms well, in raising and lowering the hoop.

Ninth Exercise.—The pupil, holding the hoop with both hands under the left arm-pit, and having the right arm half extended, with the elbow against the body, the right foot before, the left hand placed

under the right arm, the elbow against the body, must pass it over the head, under the left arm-pit again, place the right foot behind, then pass the hoop to the right, taking care to change the feet alternately, turn the hoop quite round, and raising the elbows well, return to the first position, placing the heels in a line; the pupil must change arms without quitting the hoop, and pass it under the right arm. The elbows must be well raised in these exercises.

Tenth Exercise.—The pupil, placed with the hoop in her hands close together, and having her arms extended, must pass it over her head, and allow it to descend to touch the back, the right foot must be placed before, the hoop must then be turned forward with the right arm, the left extended, and the right foot carried behind, then the hoop must be lowered, the arms extended. This exercise must be repeated, beginning with the left foot, and the pupil must take care to stand erect, and raise the shoulders well.

### EXERCISES OF THE HOOP,

COMPLICATED IN WALKING.

First Exercise.—The pupil, placed in the first position, must step forward, turn the hoop between her arms, walk forward, and place it against her shoulders, the arms extended; she must then step back with the left foot, again turn the hoop, step back with the right foot, place the hoop against her

shoulders, and bringing her heels in a line, lower the hoop. This exercise must be repeated, beginning with the left leg, and attention must be paid to extend the arms well when turning the hoop.

Second Exercise.—The pupil, holding the hoop with both hands, must turn it between her arms and place it against her shoulders, her arms extended, and the right foot before; the hoop must then be placed under the right arm-pit, the left arm resting against the head, and the right leg extended; the pupil must then walk to the side, crossing the right foot behind the left, the arms must then be extended, and the hoop placed under the left arm-pit, the right arm resting against the head; the pupil must then walk to the left side, and bring the heels in a line and the hoop against her shoulders. This exercise must be performed very slowly.

Third Exercise.—The pupil, holding the hoop with both hands, must raise the right arm, pass it over her head, and place it under the right arm-pit, the fore-arm resting upon it, and the left extended, the right leg must at the same time be extended to the right, then crossed behind the left; the hoop must then be taken from under the right arm, the elbows well raised, and the hoop placed under the left arm-pit; it must then be turned forward, and placed against the shoulders, the arms extended, and the left foot pointed to the left; then lower the hoop, bringing the right foot against the left. The pupil must repeat this exercise, beginning with the left

arm and leg, and the elbows must be raised in turning the hoop forward.

Fourth Exercise.—The pupil, placed with the hoop in both hands, must raise her arms, pass it over her head, and rest it upon and against her left shoulder, at the same time bringing the right foot forward; the right arm must then be extended, and the hoop turned round the shoulders, and lowered to the right, passing before and over the left shoulder; the left foot must be carried forward at the same time, and the pupil must advance several steps, stopping with the heels in a line, and the hoop against her shoulders, and then lower it before, in passing it over head. This exercise must be repeated, beginning with the right shoulder and the left foot.

Fifth Exercise.—The pupil, holding the hoop with both hands, the arms extended, must turn it over her head, and rest it against the left shoulder; she must at the same time step forward with the right foot, extend the right arm, and bend the left; the hoop must then be raised with the left arm, which must be stretched behind the head, the right bent and leaning against the back; the pupil must then change hands turning the hoop forwards, over the right shoulder, put the left foot forward, and place the hoop against the back, the right arm extended and the left bent. She must then walk back to her place, and repeat the same exercise with the left foot before, taking care to put the shoulders well back, when resting the hoop against her back.

Sixth Exercise.—The pupil, standing in the hoop, must take hold of it with one hand on each side, raise the arms, pass it over her head, beginning with the left shoulder, step forward at the same time with the right foot, carry the hoop in front, extending the arms, repass it over her head, step forward with the left foot, and retake her first position. This exercise must be repeated, beginning with the right shoulder and left foot, and great attention must be paid to raise the shoulders and stretch the arms forward, as the hoop is turned over the head.

Seventh Exercise.—The pupil, placed with her hands close together on the hoop, touching the toes with one extremity, and having the arms extended, must raise it by bending the arms, and elevating the elbows to the height of the shoulders, step forward at the same time with the right foot, and turn the hoop over her head; her arms must then be extended, and the left heel touched with the hoop, it must be passed to the front again, over the left shoulder, the arms extended; the pupil must advance several steps, return to her place and lower the hoop. This exercise must be repeated, beginning with the left foot.

Eighth Exercise.—The pupil, placed with the hoop in her hands, must raise her arms, pass it over her head, beginning with the left shoulder, extend the arms, and carry the hoop to touch the shoulders; she must step forward with the right foot, bend the left arm to the left, and lower the hoop behind with the right, step forward with the left foot, and

turn the hoop forward over the left shoulder; then extending the arms, place it again against her shoulders, return to her place, and restore the hoop to its first position. This exercise must be repeated, beginning with the right shoulder, and left foot; it must be performed slowly and with caution.

Ninth Exercise.—The pupil, holding the hoop with both hands under the right arm-pit, and having the right arm half extended, with the elbow resting on the hoop, the left hand placed under the right, and the elbow against the body, must step forward with the right foot, bring the hoop from under the arm, step forward with the left foot, and, in raising the elbow, pass it over her head, resume her first position, and return to her place. This exercise must be repeated with the left leg first, and the elbows must be well raised in turning the hoop.

Tenth Exercise.—The pupil, placed with the hoop in her hands close together, and having her arms extended, must raise the hoop, and place it against her shoulders; she must step forward with the right foot, turn the hoop round her body; step forward with the left foot and place the hoop under the left arm, resting her elbow upon it, the left arm half bent, and the right extended, and return to her place. This exercise must be repeated, beginning with the left foot, and attention must be paid to keep the body erect when turning the hoop.

## COMPLICATED EXERCISES OF THE ARMS,

IN PLACE, AND WALKING WITH THE ASSISTANCE OF ONE LEG ONLY.

The following Exercises presenting considerable difficulty in their performance, as the body is to be supported in equilibrium, and the leg is to support all its weight, and the muscles are to be put in action without altering the position of the body, the instructor must take care not to put the pupil into the class before her muscles are perfectly developed, and have acquired sufficient strength and pliability to perform all the movements with ease and agility, and the legs sufficiently strong alternately to support the body without the slightest difficulty.

All these exercises must be performed very slowly, in order that the pupil may not lose her equilibrium, and that the muscles may be developed with all the grace which these exercises give them.

First Exercise of the Arms.—The pupil, being placed in the first position, will gently raise up the left arm a little bent, at the same time will rest all the weight of the body on the left leg, a little inclined forward; will then raise the right leg behind, with the knee extended, the right arm will make the same movement as the leg, and place itself at the height of the shoulder, the nails of the two hands turned inwards, the head raised, and the eyes fixed on the left hand; she will then pass the right leg forward, without touching the ground, the knee always

extended. The arms will change their position, and the head will turn at the same time, fixing the eyes on the right hand; then bringing the heels in the same line, the same movement must be repeated on the right leg. Finally with the two arms, at once changing legs; and it must be remarked, that the first thing to be done is, to be exact in preserving the equilibrium of the body, and in commencing always with the right leg behind.—See Plate I. fig. 1.

Observation:—We have described the thirteen simple exercises of the legs in the former work, recommending the instructor to make the pupil perform these exercises by the assistance of the Balance; but as the pupil ought to have at this time acquired sufficient strength to perform them without the assistance of the above-named instrument, we shall give the description of the complicated ones; this is in order to give the same degree of strength to the upper and lower extremities, because in the movements of the arms we make both parts act together. The instructor will take care to make the pupil raise the arms and legs as high as possible in all the movements, in order that she may gain strength and agility in the two extremities.

## COMPLICATED EXERCISES OF THE LOWER EXTREMITIES.

First Exercise: Walking Pace.—The pupil, being placed with her two hands on her hips, will raise the right leg and the left arm as high as possible; the arm a little bent, and the hand above the shoulder; will lower quickly the leg and the arm, placing the hand on the hip, and raising at the same time the left leg and the right arm. This

exercise must be repeated several times with celerity, without altering the position of the body; the arms will then be allowed to fall close to the body, and the heels will be brought into a line.

Second Exercise of the Arms.—The pupil, being placed in the first position, will raise the right leg as high as possible, the knee bent; will extend it forward, raising the left arm along the body, the elbow upwards; will extend it to its full length, placing the fore-arm on the side opposite the head, and will then let it fall to the side; the leg then making the same movement to support itself behind, the knee stretched, the right arm will make the same movement as the left; the pupil will then bring the right foot in a line with the left, in order to perform the same movement on the right leg. The same exercise must afterwards be performed with the two arms, on one leg alternately; taking care to pass the leg forward and backwards, without touching the ground; consequently supporting the weight of the body on the part which rests on the ground.—See Plate I. fig. 2.

Second Exercise of the Legs: Quick-Step Jumping.—The pupil, being placed with the two hands on the hips, will perform this exercise on the same principles as the former; except that, in jumping, she must accompany with the arms the movement of the legs with great celerity, taking care not to continue the same exercise too long. She will then place the heels on the same line, allowing the arms to fall to the sides.

Third Exercise of the Arms.—The pupil, being placed with the two arms extended at full length, the left in front, and the right behind; the right leg will make the same movement as the arm, the knee stretched, supporting the weight of the body on the left side, the nails of the two hands turned inwards; she will then pass the right arm and the right leg forward, without touching the ground; the right arm will take the same position as the left had previously, the left will be thrown backwards, passing it as near the head as possible; let it then be placed behind, with the nails inwards; all the weight of the body will be supported on the right side; then, bringing the two heels on the same line, the pupil will perform the same exercise on the right foot, and then with both; on the right leg as well as the left. She will observe, that in this movement the foot ought never to touch the ground, and that the body ought always to be steady on that part which rests on the ground.—See Plate II. fig. 3.

Third Exercise of the Legs: Extended forward.—
The pupil, being placed with the arms extended backwards, will perform the following exercise: keeping the right leg extended forward, the left arm will perform the same movement as the right leg. She will then bring the right leg into a line with the left, with which she will make the same movement as with the right, and will make the same movement with the right arm as with the left. She must take care to perform this alternative movement with as much celerity as possible, and will conclude by

allowing the two arms to fall to the sides, bringing the two heels into the same line.

Fourth Exercise of the Arms.—The pupil, being placed with the arms forward, the backs of the hands against each other, will raise them with the elbows bent, and bring them above the head. She will then bring the right leg forward, the knee bent; will then stretch it, and bring it behind, without the foot touching the ground. The weight of the body must be supported by the left leg, the arms descending, stretched behind to their full length. The pupil will pass the leg forward, the knee stretched; will bring the heel on the same line, and will perform the same exercise on the left, taking care to accompany the movement of the hands with the eyes, so that when the movement is to the right the head will turn to the left, and when the movement is to the left the head will turn to the right; then, bringing the heels into the same line, the arms will fall to the sides, assuming the first position.—See Plate II. fig. 4.

Fourth Exercise of the Legs: Balancing on one.—The pupil, being placed in the position abovementioned, will bring the right arm and leg stretched behind, and the left arm forwards, the weight of the body supported on the left leg; will then balance backwards and forwards on that leg without touching the ground, the body always preserving its equilibrium, making the movement of the arms follow that of the legs. She will then bring the right heel on the same line with the left, and will make the same movement on the right leg, taking care to

keep the knees always extended, the body free, and the shoulders square; will then bring the right heel on the same line as the left, and will allow the two arms to fall to the sides.

Fifth Exercise of the Arms.—The pupil, having the two arms folded, the elbows at the height of the shoulders, the two hands gently touching the latter, the fingers half open, will make the first movement, raising the right leg towards the right, with the knee bent; she will then extend it at the side, and the left arm will unfold itself to the left, on a line with the shoulder; she will then place the right leg behind the left, without touching the ground; the left hand will place itself on the shoulder, and the right arm will extend itself to the right. She will then bring the right foot on the same line as the left, and will repeat the same exercise on the left leg. The same exercise may be performed with the two arms on the right leg, bringing the left leg behind, the knee stretched; this will then descend, extending the right leg, and stretching the two arms on the sides, and on a line with the shoulders; she will resume her position, straightening the knee and bending the arms; she will pass the leg forward without touching the ground. She will then repeat the same exercise, bringing the right foot on a line with the left; the same must be done with the left. The pupil will take care that the foot which is in motion never touches the ground.—See Plate II. fig. 5.

Fifth Exercise of the Legs: Raising behind alternately.—The pupil, having the right leg bent

behind, the left arm raised and half stretched, the weight of the body supported by the left leg, and the upper part of the right hand on the hip, she will perform the following exercise: allowing the right foot to descend to the ground, the left hand, which is on the hip, will rise at the same time as the left leg and the right arm. She will perform this exercise with as much celerity as possible. As the movement ought to be a little sudden, the pupil will take care not to repeat it too often, lest her respiration should be disturbed.

Sixth Exercise of the Arms.—The pupil, having the two arms falling naturally to the sides, will raise the right arm, passing the hand under the shoulder, and will bring it on a level with the latter, the elbow raised; she will then extend the arm, bringing the right leg to the right, the knee bent; then, extending it, she will allow the arm to descend to the side; she will bring the leg behind the left, without The left arm touching the ground, the knee bent. will begin its movement, allowing it afterwards to descend to the side. This motion must be made alternately with the arm on the same leg. She will then bring the legs into the same line, and will repeat the same movement on the right, and then with the two arms, the right leg extended behind; then with both, the same leg extended forwards, and then on the left leg. The pupil will take care, in this movement, to keep the knee of the leg bearing the weight of the body completely extended. — See Plate II.

Sixth Exercise of the Legs: Crossing in Front.—
The pupil, having the right leg crossed over the left, the left arm raised and half stretched, the upper part of the hand supported on the hip, will change legs, bringing the right heel against the left, and the left leg will cross over the right, at the same time that the hand descends to the hip the upper part of it thus supported; and the left hand will make the same movement as the right, continuing the same movement without stopping. As this exercise is rather sudden, the pupil will take care to finish it quickly, bringing the two heels into the same line, permitting the two arms to fall to the sides.

Seventh Exercise of the Arms.—The pupil, with the arms falling naturally to the sides, will pass the right leg stretched over the left, without touching the ground, the right arm will then be brought forwards, and will pass at full length above the right shoulder, it will then be extended to the side preserving the elbow at the height of the shoulder; the left will place itself at two feet distance from the body, the nails turned inwards; the right arm will then descend to the side of the body. The left leg will then perform the same movement as the right; the arms will change at the same time as the legs, the right leg will turn to the right, the arm stretched, and place itself at the same line as the left, repeating with it the same exercise. The pupil will then perform the same exercise with the two arms, on the two legs alternately, forwards and backwards. She will take care that the leg in motion, instead of

being placed at the side, shall be placed behind; and the knee of the leg resting on the ground ought to be tense.—See Plate II. fig. 7.

Seventh Exercise of the Legs: Crossing behind.

—The pupil, having the right leg crossed over the left, the left arm raised to the height of the shoulder, the right arm behind, will change legs, bringing the right heel on a line with the left by means of a jump; will change legs, bringing the left behind the right; the right arm will then rise, and the left will descend, at the same time changing legs alternately, and always keeping the knee stretched.

Eighth Exercise of the Arms.—The pupil, placed in the above-mentioned position, will bring the right leg behind the left, the knee bent; will at the same time bring the arm to the left, making it describe an entire circle on a level with the eyes, the nails turned upwards, and the elbow as high as possible; will lower it to the right, beginning the same movement with the left, and the right leg will place itself over the left without touching the ground, and preserving the knee extended. This movement must be made alternately with the arms, then, bringing the right heel on a line with the left, she will begin the same exercise with the left leg; the same movement will then be made with the two arms and the two legs alternately, taking care that the leg in motion passes behind the other, preserving the body erect, and the knee stretched, the arms crossed one over the other, the nails in the air, and the elbow as high as possible.—See Plate II. fig. 8.

Eighth Exercise of the Legs: Cross-Step in Place.—The pupil will bring the right leg behind the left, and the left heel opposite the corner of the foot, the left arm raised in the air at its full length; will cross-step, bending the left knee, and the right arm stretched, which will then descend; she will then perform the same movement with the right, stretching the left, the left arm will descend and the right rise. This exercise will be performed alternately without stopping. She will bring the heel on the same line, and will repeat the same exercise with the right leg forward, taking care to lower and raise the arms at the same time as the knees.

Ninth Exercise of the Arms.—The pupil, having the left hand in front of the body and the right behind, at two feet distance, will raise the left hand opposite the centre of the body above the head, the elbow as high as possible; will at the same time raise the right leg behind, the knee bent will allow the hand to descend behind the body, the left bent; will then lower the hand to the left: and then beginning the same exercise with the right hand, bringing the right leg extended in front, the arm will descend to the side, and the heel on the same line. Then both at once on the left leg; and she will take care that the two arms descend together; and that the whole weight of the body is supported on the leg which rests on the ground, and the knee bent; will then stretch the knee, and return to her position. She will take care never to touch the ground with the leg which is raised.—See Plate II. fig. 9.

Ninth Exercise of the Legs: Crossing in Walking.—The pupil, having the left leg behind the right, the right hand raised, and the arm half stretched, will walk sideways, beginning the movement with the right leg, then crossing the left behind the right, the right hand will descend, and the left will rise, and will walk thus several times; will change legs, and repeat the same movement; will return to the position, with the two hands on the hips.

Tenth Exercise of the Arms.—The pupil, having the right leg crossed over the left, bringing the left arm to the right, will make it pass above the head, the elbow as high as possible, and descend to the ·left; will pass the right leg behind, crossing it behind the left; the right arm will make the same movement as the left; will bring the heel on the same line, and repeat the same movement with the two arms, the right leg behind; afterwards with them and the left in front; she will do the same with both and the left leg, and observe that, in the motion of the two arms, the knee of the leg resting on the ground ought to extend at the same time as the arms descend; she will bring the heels on the same line, the knees stretched, taking care that the leg in motion never touches the ground.—See Plate II. fig. 10.

Tenth Exercise of the Legs: Balancing with a Double Jump.—The pupil, having the right leg extended behind the left, the left arm raised, and the right supported on the hip, will jump twice, bringing

the right leg extended to the side, and will then bring it against the left, raising the right. The right arm will rise and the left descend, repeating the same exercise on the leg resting on the ground. She will do the same forward and then backwards, repeating this exercise several times; she will then return to her position. She will take care that the arms accompany the motion of the legs.

Eleventh Exercise of the Arms.—The pupil, having the left arm stretched above the shoulder, the elbow raised, and the fingers half open, will extend it forwards, throwing the right leg behind, the knee stretched; she will allow the arm to fall to the side, bringing the right leg forward, the knee stretched, the right arm will perform the same motion as the left; she will bring the heels into the same line, and repeat the same exercise on the right leg, with the two arms on the two legs alternately, always taking care never to touch the ground with the foot in motion; and will finish the exercise by bringing the heels on the same line, and allowing the arms to fall to the sides.—See Plate II. fig. 11.

Eleventh Exercise of the Legs: Crossing behind in Jumping.—The pupil, having the left arm raised and the right knee extended, will perform the above exercise, placing the right leg on the ground; will at the same time place the left leg behind the right, taking a small jump, the left hand will descend, and the right rise; she will walk several paces aside, will return in the same manner, changing legs, and will take care to raise and lower the arms every time

a step is taken; she will then return, supporting the upper part of the hands on the hips.

Twelfth Exercise of the Arms.—The pupil, standing on the left leg, the right being raised, will turn on the left heel, raising the point of the foot, and turning to the left, the right arm will turn to the right, passing it above the head, and lowering it to the right; she will then turn to the right on the heel, and will make the left arm perform the same movement as the right; will then bring the heel on the same line, and repeat the same exercise on the right leg; afterwards with the two arms on the two legs alternately, always taking care to avoid touching the ground with the foot which is in motion.—See Plate II. fig. 12.

Twelfth Exercise of the Legs: Turning on the Two Heels, the face behind.—The pupil, having the right foot about two feet in front of the left, the right knee extended and the left stretched, the right arm extended in front of the body, and a little bent, the left arm extended at full length behind, will turn on the two heels, raising the points of the feet, with the face behind, and returning with the left knee extended, the right stretched, the left arm in front, and the right stretched behind; then, bringing the two heels on the same line, she will repeat the same exercise with the arm, and the left leg forward. The pupil will take care to turn gently on the two heels, in order to perform the above exercise gracefully.

Thirteenth and last Exercise of the Arms.—The

pupil, standing on the left leg, the left arm half extended in front, and on a level with the eyes, the right leg extended behind, the knee stretched, the body leaning forward, will lower the left arm at the side, bringing the right leg forward, the knee extended; the right arm should then take the position of the left, and the left extend itself behind, it will return with the leg behind, and by means of a jump she will change her position, bringing the right legforward, and placing the foot on the ground, the right arm in front of the body, and the left arm and left leg extended behind; the whole weight of the body will rest on the right leg, repeating the same movement as the left. She will then bring the heels into the same line, and allow the arms to fall to the sides.—See Plate II. fig. 13.

Thirteenth and last Exercise of the Legs: Touching the Two Extremities.—The pupil, having the right leg three feet in front, the right knee extended and the left stretched, the right arm extended in front and the left behind, will touch the point of the left foot with the right hand, turning on the two heels, extending the two knees, will return in the same manner, and will touch the point of the right foot with the left hand, the knees always stretched; will return to the first position, and do the same with the left leg in front. She will observe that, in this movement, the body must be extended and the arms stretched to their full length.

I AM now about to describe the Complicated Exercises in Walking, with the assistance of one leg only; it being understood, that these exercises present great difficulties in their performance, and that the pupil will never acquire sufficient pliability in the knees unless she passes through the other exercises, in order to prepare her muscles to act with grace, so as to proceed on one leg as well as The pupil will find some difficulties in performing these exercises, because in all of them the weight of the body being supported by one leg, it ought to remain erect and steady on the hips, the arms ought to act without stiffness, the leg to extend when the exercise requires it, without making use of that which is in motion. These exercises must also be performed with all possible slowness, as they make all the muscles of the body act at once; the pupil should take care to rest herself as soon as ever she is fatigued. I do not here describe the complicated motions in walking for the lower parts of the body, because the same motion which is made in her place may be made in walking, by making use of the same means; except that she ought to advance, retire, change legs, always continuing her pace without changing the position of the body. The instructor will take care not to make the pupil perform these exercises in walking, because that would be too fatiguing for her.

#### COMPLICATED EXERCISES IN WALKING,

WITH THE ASSISTANCE OF A SINGLE LEG.

First Exercise.—The pupil, having the left foot on the ground, will lean the weight of the body forwards, raising the right leg behind, the knee bent, and the left arm half stretched in front above the head, the right arm half stretched behind, the nails inwards, the eyes fixed on the left hand; will bring the right leg stretched in front, turning gently on the point of the left foot without losing her balance, the left arm will descend, and the right will rise, assuming the position of the left, the left that of the right; will then walk several paces forward, and will return and assume her original position; and then walk with both at once, making use of the same means, except that the two arms ought to be half extended forwards, the right a little higher than the left; she will then pass the leg forwards, lower the arm, place the leg on the ground, again raise the arm in the same position, the left higher than the right; will take several steps, and return in the same manner, using the same principle.

Second Exercise.—The pupil, having the heels on the same line, will raise the right arm along the body, the elbow raised; will raise at the same time the right knee as high as possible, the arm will then place itself half extended in front, and opposite the shoulder, the left arm will then extend itself two feet behind, the nails turned inwards; she will extend the leg forward, allowing it to descend to the ground, the right arm will place itself behind; and the right arm and left leg will recommence the same movement on the same principles; will walk several paces, and return in the same manner; will reassume her position, and then perform the same movement with the two arms and the left leg, except that the two arms ought to act at once; and she will take care to preserve carefully her balance on the leg which rests on the ground before the other passes forward.

Third Exercise.—The pupil, having the left arm extended in front, will support the whole weight of the body on the part which is on the ground, gently raising the right leg behind, the knee stretched, the right arm extended at two feet distance from the body, she will then raise it above the shoulder against the head; at the same time she will pass the right leg extended forward, the left arm will descend and place itself behind, the nails inwards; she will walk several paces; will return to the same place and resume her position; will make the same movement with the two arms and the right leg, raising the two arms behind; she will raise the left leg, will pass the two arms forward, and over the shoulders, and will place herself with the two arms half extended, the left higher than the right. She will then walk, passing the left leg stretched in front, the arms will fall back over the shoulders, the foot will place itself on the ground bringing the two arms forward. She will preserve her balance, and the arms will assume

the same position, except that the right ought to be higher than the left; she will walk several paces forward, returning to the same position, using the same principles.

Fourth Exercise.—The pupil, with the arms bent, the hands touching the shoulders, the elbows at their height, will extend the right arm, raising the right leg; will extend it then and place it on the ground, bearing all the weight of the body on the right side; the left hand will then place itself on the shoulder, and the right arm will extend itself on the right side, the left leg will raise itself from the ground, and will place itself behind the right, the knee extended, and the right knee stretched; she will then walk to the right, placing the left foot on the ground behind the right, then raising the right leg, the knee extended, the right arm stretched, the right hand on the right shoulder, she will walk several paces to the side; will return thus to the same position, using the same principles with the left leg. She will then make the same movement with the two arms, bringing the right leg extended forward, resting on the left knee; the two arms will extend down the sides. She will then gently raise the two hands on the shoulders, will place the right foot on the ground, then, passing the left leg extended forward, she will allow herself to descend on the left knee, the arms extended at the side. She will rise in the same manner, then, supporting the two hands on the two shoulders, she will walk forward. several paces; will return in the same manner, using

the same principles; will take care never to touch the ground with the leg in motion.

Fifth Exercise.—The pupil, having the heels in the same line, the arms falling naturally to the sides, will raise the left leg, the knee extended, all the weight of the body resting on the right leg, the knee stretched; will pass the right hand to the height of the arm-pit, the elbow raised; will then raise it over the shoulder, extending it to the right, the arm bent, and the elbow at its height. She will then extend the left arm and the left leg on the left side, preserving her balance on the right leg, the two arms bent, the weight of the body resting on the leg, the knee extended; will then pass the leg forward, the arms falling to the sides, and place the foot on the ground, leaning the body forward; will raise the right leg from the ground, the knee extended; and the arms will make the same movement, the right in front and the left behind, and will walk several paces; will return in the same way, using the same principles, taking care that the leg in motion never touches the ground.

Sixth Exercise.—The pupil, having the heels on the same line, the backs of the hands against each other in front, will raise them over the head, touching the body, the left knee will rise to the height of the hip; will extend it behind, bearing the whole weight of the body on the right side, dividing the arms, and preserving the right higher than the left; will bring the legs both in front, the knee extended, the arms will fall to the sides; she will then extend it forwards,

and place it on the ground; the right leg then rises from the ground, the knee extended; the arms will begin the same motion, will descend to the sides, the legs will extend in front, and place themselves on the ground. She will walk several paces thus, and will return to her original position, taking care that the weight of the body rests on that part which is on the ground, and to preserve its equilibrium on the leg, without the leg in motion touching the ground, and proceeding always with the greatest possible slowness.

Seventh Exercise.—The pupil, having the heels on the same line, will bring the right hand in front; will raise it again to the height of the shoulder, the elbow raised; will pass it between the head and the arm, placing the arm half stretched on the side, rising at the same time the left leg behind the right, the leg extended; will support the whole weight of the body on the left leg, preserving her equilibrium; the left arm will make the same movement as the right, and she will place it at the side half stretched, the hand at the height of the shoulder, the left leg will cross behind the right, placing it on the ground; will raise at the same time the right, the knee extended, the two arms falling to the sides; she will then extend the leg to the right, placing it to the ground; the arms will recommence their movements, the left leg will rise from the ground extended; the arms will take the same position, the weight of the body resting on the right side; will cross-step, walk to the right, will return in the same manner, always making the same movements; she will then make the same movement forward, raising the right leg behind, the knee extended; the arms will rise and she will place them at the sides, the right higher than the left, the body upright over the hips; will then pass the leg extended in front, without touching the ground; the arms will descend to the sides, and the foot will be placed on the ground; she will then raise the left leg, the knee extended, the arms resuming their position, the left higher than the right; will walk several paces forward, return in the same way, carefully preserving her equilibrium.

Eighth Exercise.—The pupil, having the right arm opposite the eyes, the nails turned upwards, the elbow raised, the left at a foot distance from the body, the nails upwards, will support the whole weight of the body on the left side, the knee extended, the right knee extended, the leg crossed behind the left; will allow the right arm to fall to the right side, passing on a level with the eyes, the leg extended on the right side at full length; she will then place the foot on the ground, at the same time raising the left foot, the knee extended, the left arm then passes along the level of the eyes, commencing with the right side, the left leg crosses behind the right, the foot descends to the ground, and the arm to the side; she will thus walk, raising the right leg several paces; will return in the same way on the same principle; then with the two arms behind, the knee extended, the body steady on the part resting on the ground; she will cross the two arms, the nails turned upwards; they will then pass through the level of the

eyes, the elbow raised; they will then fall to the sides, passing the right leg forward, the knee stretched; she will then take one step forward, placing the point of the foot on the ground, and raising the left leg, the knee extended; she will then repeat the exercise with the two arms, walking several paces forwards, return in the same way, never touching the ground with the leg in motion.

Ninth Exercise.—The pupil, having the right leg extended, the body steady on the left, will extend the right hand forwards, then raise it opposite the centre of the body, above the head, the elbow raised, will allow it to descend behind, and then to the side; the right leg then comes in front. of the body, the knee stretched; she will then take a long step forward, placing the foot on the ground, raising the left leg, the knee extended; she will then commence the motion with the left arm, will walk several paces forward, return in the same manner, on the same principles; then with both at once, the right leg raised, the knee extended; it will then descend to the right; she will recommence the same exercise, passing the leg extended in front, place the foot on the ground; repeat the same exercise, raising the left; and after making several paces forward, will return in the same manner; observing, that the motions with the leg raised ought to be made with all possible slowness and grace.

Tenth Exercise.—The pupil, having the left leg crossed before the right, the knee stretched, the right arm will pass in a line with the left shoulder, passing

above the head, it will then fall to the right, and the left arm will place itself at a foot distance from the body; she will then change legs, and begin the same exercise with the left arm; will place the foot on the ground, with the whole weight of the body on the right side, the left leg raised, the knee bent behind the right; she will then place it on the ground, raising the right leg extended over the left; she will begin her exercise by raising the right leg to the right, will walk several paces to the side, and will return in the same manner on the same principle; will walk forward, with the two arms and the right leg raised behind, the knee bent; will then pass it forward, the knee stretched, place it on the ground, the arms crossed above the head; will raise the left leg from the ground, and will bend the right knee, the arm will fall to the side; then, stretching the knee, she will pass the left leg forward; will walk some paces, repeating the same exercise; will return, observing to rise and descend on the knee resting on the ground.

Eleventh Exercise.—The pupil, standing on the left leg, the right extended behind, all the weight of the body on the left side, the left arm half stretched behind, the nails inwards, the right arm extended, the hand above the shoulder, the elbow higher than the fore-arm, she will extend it, bringing the left leg forward and to the ground; will raise the left leg, seeking her balance on the right, the right arm will descend, and the left make the same movement as the right; will walk a number of paces, and then

return in the same manner; afterwards, performing the same exercises with the two arms and the right leg, on the same principle; will walk several paces, and return in the same way, always preventing the leg in motion from touching the ground.

Twelfth Exercise.—The pupil, standing on the left leg extended behind, will keep her balance, raising the right arm extended to the height of the forehead, the elbow higher than the hand, the right arm at full length at the side; will pass the right leg forward, the right arm descending and the left rising; will place the foot on the ground, raising the left leg, the right arm rising and the left descending; will walk several paces, and will return in the same manner. She will then continue the same exercise with the two arms, making them form a circle; and when she changes legs, the corresponding arm will always be higher than the other.

Thirteenth and last Exercise.—The pupil, standing on the left leg, the right knee extended, the left arm raised at its full length, the wrist bent, the right extended behind, will turn on the left foot without touching the ground, looking the opposite way, the right leg will come forward, the left arm descending and the right rising; she will then place the foot to the ground, raising the left leg; will then walk several paces forwards, and return on the same principle. She will then begin the same movement with the two arms at once, on the same principles, and with the greatest slowness.

# COMPLICATED EXERCISES OF THE CANE,

IN PLACE, AND WALKING WITH THE ASSISTANCE OF ONE LEG ONLY.

Before I enter into a description of these exercises, it will be necessary to observe, that the pupil ought not to proceed to them without having previously passed through the others, and acquired sufficient strength to preserve her balance on one leg, without changing the position of the body; for they require peculiar flexibility and ease in the motions of the muscles.

First Exercise: Complicated in Place.—The pupil, holding the Cane in both hands, will take one step forward with the right foot, the arms stretched; will rest the whole weight of the body on the right side, preserving the body erect and the knee stretched, the left leg will rise from the ground, the Cane will rise to the height of the breast, the arms bent and the elbows at the height of the shoulders; will pass the left leg stretched in front, without touching the ground; will raise the Cane at the same time above the head, the arms stretched; will bend the left knee, and lower the Cane on the shoulders, without touching the ground with the left foot; will rise again, gently extending the arms and knees; will pass the left leg behind; she will repeat the same exercise with the right leg; she will rise again, will lower the Cane gently, and bring the left heel on a line with the right. This exercise must be performed with the greatest slowness.—See Plate III. fig. 1.

Second Exercise.—The pupil, having the two arms stretched, and the Cane in the two hands, will bring the right foot forward; will bring the Cane above the head, the arms extended, bringing at the same time the left leg to the side, the knee stretched; will bring the Cane behind the shoulders, bending the left arm, and extending the right to its full length; will cross the left leg behind the right, changing shoulders with the Cane; will gently place the left leg on the ground, raising the right leg at the side, the knee stretched; will cross it behind the left, changing shoulders with the Cane, and raising the left leg in the same manner; will then place the left leg on the ground, raising the right leg, changing shoulders with the Cane; will bring the heels on the same line. The same exercise will then be repeated on the left leg, observing that, in changing shoulders with the Cane, one arm must always descend and the other rise.—See Plate III. fig. 2.

Third Exercise.—The pupil, being placed as in the last exercise, will rise on the right foot, raising the left leg, the knee bent; will raise the Cane above the head, the arms extended, bend the right arm under the left shoulder, and allow the left arm to descend on a level with the shoulder; the Cane will be again brought in front of the body, the arms stretched, then pass the left leg forward, without touching the ground, bend the left arm, and bring it

under the right shoulder; the arm will descend on a level with the shoulder; will bring the arms bearing the Cane extended in front, the left leg at the side of the right; will repeat the exercise on the right leg, always preserving the body in equilibrium on the leg resting on the ground.—See Plate III. fig. 3.

Fourth Exercise.—The pupil, with the Cane in her hands as in the last exercise, will raise the left leg, the knee bent, the Cane in front, the arms stretched, the right above and the left below; pass the Cane above the head, beginning with the right arm, place it behind the shoulders, the right arm bent and the left extended; repass it over the head, bringing, at the same time, the left leg, stretched in front; change the positions of the hands, and bring the Cane over the head, behind the shoulders, the left arm bent and the right extended, and return to the first position. The arms must be well raised in every movement.—See Plate III. fig. 4.

Fifth Exercise.—The pupil, having the Cane in her hands, and the right foot in front, will raise the left leg, the knee bent, raise the Cane with the arms stretched, raising the right to the height of the right shoulder, and the left extended below, at its full length; will pass the Cane above the head, beginning with the left shoulder; will pass it behind and lower it to the right, bringing the left leg in front, the knee stretched; will bring the arms forward, the right below and the left above; will commence the same movement on the right side, bringing the arms over the head, bringing the left leg behind, pass the Cane

round, return with the arms stretched, and the left foot in a line with the right. The same movement will then be repeated with the right leg raised.—

See Plate III. fig. 5.

Sixth Exercise.—The pupil, placed as in the last exercise, will raise the Cane above her head, the arms stretched; will lower it behind on a line with the shoulders, turn it to the left, bringing the left leg forward; will continue the same movement without bending the arms, repass the leg behind, and begin the same exercise on the opposite side, bring the heel to the ground, and repeat the same exercise on the left leg, taking care always to preserve the arms stretched in turning it behind, and never to touch the ground with the foot in motion.—See Plate III. fig. 6.

Seventh Exercise.—The pupil, balanced on the right leg, the left raised, knee bent, will bring the Cane forwards, the arms stretched, the left above and the right below, turn the arms over the head, beginning at the right side, pass it behind the shoulders, and extend the arms; pass the right foot forward, the body erect, the knee stretched; will bring the Cane over the left shoulder, the right leg behind, arms extended in front; repeat the same exercise, with the right arm first, the heel on the same line; perform the same exercise on the left leg, taking particular care to keep the shoulders back in the movement of the arms.—See Plate III. fig. 7.

Eighth Exercise.—The pupil, holding the Cane in both hands, the right foot in front, will rise gently

on it, the left arm bent and the fore-arm in front, the right stretched at full length, the Cane against the right shoulder; will raise at the same time the left leg, knee bent, raise the Cane, stretching the right arm, extending the left at its full length; the leg will move in front, the knee stretched, then lower the Cane, extending the left arm and stretching the right; will pass the leg behind, lowering the Cane to the left, the arms stretched, the right bent opposite the left shoulder, and raise it then to the right; she will bring the Cane above the head, the heels on the same line; will repeat the same exercise on the left leg; and will bend the knee a little in raising and lowering the Cane.—See Plate III. fig. 8.

Ninth Exercise.—The pupil, holding the Cane in both hands, the right foot in front, will rise gently, extending the left arm at full length to the left side, bring the right hand against the breast, the Cane along the left arm, then raising the left leg, the knee bent, will lower the left arm, turning the body a little, the arm crossed; will bring it in front, lowering the right arm, bringing it against the left shoulder, the left arm will descend to the left side; will raise the Cane with the two hands, passing it over the head, the right arm will extend itself to the right side, the left hand against the breast, and the Cane along the arm, the foot will extend forwards; she will then bend the right arm, bringing the hand on and against the left shoulder, making the Cane turn round above the head; she will stretch the arms, and bring the heels on the same line; will lower the Cane, and repeat the same movement on the left foot, taking care to bend the arms and elbows in these movements.—See Plate III. fig. 9.

Tenth Exercise.—The pupil, having the arms extended, the Cane between the hands, the right foot in front, will lean the weight of the body on the right foot on the ground, raising the left leg, bend the arms, and raise the Cane to the height of the eyes, then lower it to the right, bringing the right arm extended behind at full length, and the left hand opposite the right shoulder; will lower it then at full length in front, the right arm will rise, passing the Cane against the left shoulder and over the head, the left foot passes in front, and the arms will repeat the same motion, making the same turn; will place themselves extended over the head, bringing the left foot to the side, lower the Cane, and repeat the motion on the left leg, taking care to extend the body every time the arm goes behind.—See Plate III. fig. 10.

## COMPLICATED EXERCISES OF THE CANE

First Exercise.—The pupil, having the right foot in front, the Cane in the hands, the arms stretched, will raise the left leg, the knee bent, raise the Cane to the height of the shoulders, passing the leg in front, extending the arms at full length in front; will place the foot on the ground, raising the right; will return it against the breast, place the arms

stretched above the head, bring the right leg in front, bending the knee, and the Cane on the shoulders; will extend the arms, pass the right leg behind, the Cane in the first position; will then extend the arms in front; will place the foot on the ground, raising the left; will bring the Cane against the breast, pass the left foot behind, making the same movements; walk then to her place, and then repeat the same exercise on the left leg, preserving her balance without the foot in motion touching the ground.

Second Exercise.—The pupil, with arms extended and Cane in hands, will bring the right foot in front, lean the weight of the body on it, raise the Cane above the head, arms stretched, bring the left leg to the side, knee stretched, without touching the ground, cross the Cane behind the shoulders, bending the left arm, and extending the right at full length; will place the left leg on the ground, change shoulders with the Cane on the same principles, the right leg raised behind the left, knee bent; then place it on the ground, raising the left leg at the side, raise the arms above the head, bringing the left heel on the same line: repeat the same exercise with the left leg. The same will be done in advancing and retreating; and she will observe, that in the latter movements she must turn her body sideways, in raising the heel from the ground.

Third Exercise.—The pupil, with Cane in both hands, will rise on the right leg, raising the left knee bent, raise the Cane above the head, then place it

beneath the left arm, bringing the left leg in front, knee stretched; place the foot on the ground, raising the right leg and bringing it forward, raise the Cane with the right hand, bringing the left hand opposite the right shoulder, turn the Cane, stretching the arms, and place it beneath the right arm; will walk several paces in this way, and return the same; will repeat the same exercise on the left leg.

Fourth Exercise.—The pupil, with the Cane in the two hands, arms extended, will rise on the right foot, raise the left leg, knee bent, Cane in front of the body, arms stretched, right above and left below, pass the Cane over the head, beginning with the right side, bringing the left leg stretched in front, without touching the ground; will cross the Cane behind the shoulders, the right arm bent and the left stretched; will place the left foot on the ground, raising the right leg, the knee bent; will pass the Cane above the head, allowing the right arm to descend, and raising the left, repass the Cane over the head, bringing the right leg in front; she will walk in this way several paces, and repeat the same exercise on the left leg, without ever touching the ground with the point of the foot.

Fifth Exercise.—The pupil, with the Cane in the two hands, the arms stretched, right foot in front, will rise on the right foot, raising the left leg, knee bent, raise the Cane, arms stretched, bring right arm to the height of right shoulder, left extended, pass Cane over left shoulder, bringing left leg stretched in front; will make the Cane go

completely behind the shoulders, and return with arms stretched; will place the left foot on the ground, raising the right knee bent; will change hands on the cane, then bring it over the right shoulder, completely round, bringing the right in front; will walk several paces, and return in the same manner; will repeat the same exercise on the other leg.

Sixth Exercise.—The pupil, having the Cane in the hands, will raise it above the head; will raise right leg, knee bent, lower the Cane behind, arms stretched, and on a line with the shoulders; will make it turn round behind the shoulders, bringing the right leg in front, knee stretched, raising the left leg, knee bent; will continue the same movement for several paces forward; will return in the same way, turning the Cane on the opposite side; will change legs, and begin on the other side. In this exercise the shoulders, and not the body, must be turned, preserving the arms always stretched.

Seventh Exercise.—The pupil, as before, standing on the right leg, left raised, Cane in front, arms stretched, left above and right below, will turn Cane above the head, beginning with right shoulder, bring arms stretched, left leg in front, knee extended, raise Cane, pass it over left shoulder, place foot on the ground, and, raising the left, extend the arms; repass the Cane over the head, beginning on the opposite side, bring the left leg in front, walk several paces, and return in the same manner; change legs, and repeat the same exercises.

Eighth Exercise.—The pupil, as before, right foot in front, will rise gently on it, bringing the left bent and the fore arm in front, the right extended at full length, the Cane against the right shoulder; will raise at the same time the left leg, pass it in front, the right arm rises, the left arm extends and rises, then descends to the left, the left arm at full length, the left foot descends to the ground, the right rises, knee bent; she will continue the same movement with the Cane in walking several paces forward, passing it from right to left on the same principles. The arms must be raised, and bent with all possible slowness.

Ninth Exercise.—The pupil, as before, right foot in front, will rise, gently extending the left arm at full length on the left side; will bring the left hand above and against the breast, raise the left knee, lower the right arm in front, turning Cane to the left, passing it in front, lower the foot to the ground in front, raising the right, knee bent, pass it forward, turning the Cane to the right; will walk several paces and return the same; change legs, and repeat the same exercise. The arms must always be perfectly raised.

Tenth and last Exercise.—The pupil, as before, right foot in front, will rest on it, raising the left foot, bend the arms, and raise the Cane to the height of the eyes; will then lower it to the right, bringing the right arm extended at full length behind, and the left hand opposite the right shoulder, then lower the

left arm in front, turning the Cane in the same manner, the arms crossed; will raise it to the left, passing the left leg in front, the knee stretched; will pass the arms over the head, allowing the Cane to descend to the right, the foot goes to the ground, and the right leg rises, knee bent; the same exercise will be recommenced, passing the right leg in front; she will walk several paces, and return in the same manner. The same exercise will be repeated on the left leg. She must observe, that the shoulder should, in all movements of the Cane, be brought forward.

#### EXERCISES OF THE BALANCE.

Before I continue the description of the Exercises of the Balance, I must observe to the pupil, that the six exercises I intend to place after the eight already published in my first edition, will be very difficult to perform, because they are calculated to give greater strength to the muscles; and, to perform them, it will be absolutely necessary to prepare the muscles with the other exercises. I must also observe, that it will be absolutely necessary for the pupil to wear the Calisthenic Dress, as the usual female dress will impede her movements.

First Exercise.—The pupil must hold the pole of the balance with both hands, and having her heels in a line, she must stretch her arms, sink gradually backwards, lean to the right, and bending her arms a little, go round on her heels, and returning to the left, retake her first position, by drawing the balance towards her, and bending her arms. The pupil must repeat this exercise, going round to the left, taking care not to move her heels from their place, and supporting her body by the strength of her arms.—See Plate IV. fig. 1.

Second Exercise.—The pupil, holding the balance with her hands as far asunder as possible, must raise the right leg, and letting her body sink to the left side, remain with it extended, her left arm stretched out, and her right half bent; she must push the balance to the left, keeping her equilibrium, and raise herself by the strength of her arms; she must then bend her knee, and sink in the same way to the right, stretching her right arm and bending her left. The pupil must take care when performing this exercise to sink very gently.—See Plate IV. fig. 2.

Third Exercise.—The pupil, having both hands on the pole of the balance, as far from each other as possible, must step to the left with the left foot, the knee bent and the right extended, bearing the weight of her body on the left side, and sink with her arms stretched out; she must then raise her body by the strength of her arms, bend her knees, and cross the left leg behind the right, the right being extended and the left bent; she must raise her body again, and place her left heel in a line with the right, retake her first position, and repeat the same exercise with the right leg. The master must take

care to assist the pupil in all these exercises at first, and prevent the balance turning.—See Plate IV. fig. 3.

Fourth Exercise.—The pupil, taking hold of the balance with her hands as far asunder as possible, must sink down backwards, her arms extended; she must then raise herself on both heels by the strength of her arms, and, pushing the balance to the right, with the right hand, go entirely round on her heels, and return to her place, by drawing the balance towards her. She must repeat the same exercise on the left side, employing the same movements. The pupil must take care to hold her arms half extended, and not to move her heels.—See Plate IV. fig. 4.

Fifth Exercise.—The pupil, standing under the balance with her hands far apart, must raise her left leg, bend the knee and lean forwards, stretching her arms; she must then turn the balance to the left, supporting her body on her arms, and on the toe of the left foot go round slowly without moving the foot, and put down her right foot with both heels in a line. The pupil must then raise the left leg, and repeat the same exercise to the left, taking care to perform it slowly.—See Plate IV. fig. 5.

Sixth Exercise.—The balance being placed in a line with the forehead, the pupil must take hold of it with her hands very far apart, step to the left with the left foot, and place the right against it, the ropes of the balance must be fully stretched, and the pupil must fall to the right, pushing the balance aside

with the right arm, and supporting her body with the left, the arms extended; she must then raise herself without moving her heels, cross the left leg behind the right, take a long step to the right with the right foot, and bring the left foot against it, supporting her body by her arms. She must repeat the same exercise with the right foot, first taking care not to let go the balance when she changes her place.—See Plate IV. fig. 6.

## A COURSE

OF

## GYMNASTIC EXERCISES,

WHICH MAY BE

### PERFORMED IN PRIVATE,

Without attending the Gymnasium.

#### INTRODUCTION.

Within the last few years, several works on Gymnastics have appeared. They have, no doubt, been beneficial in recommending a science which has many claims on the attention of the public; but, as far as the Author of the following pages can judge, they have been defective in that most important feature—simplicity of description. This has, of course, thrown considerable difficulty in the way of those desirous of practising the Exercises.

The Author's object, in publishing the present Work, has been to afford facility for their practice to those who, from various causes, may be prevented from attending the Gymnasium. In

fulfilling this intention, he has had advantages not commonly possessed by professors of the science, in having been, for several years, Professor, with Captain Clias, at the Royal Military Schools; and, since that gentleman's departure from England, been in the constant habit of teaching the Exercises at several of the highest academies in the neighbourhood of the metropolis.

#### PRELIMINARY EXERCISES.

MOVEMENT OF THE ARMS AND LEGS, SIMPLE AND COMPLICATED, WITH AND WITHOUT WALKING.

These Exercises being already known, and having been described by Captain Clias (as will be seen in the fourth edition of his Treatise on Gymnastics, p. 77), I shall not explain them. They have long been very successfully practised. I only therefore refer to them here before my own are defined, as the pupils cannot proceed to the more difficult ones until the muscles have been previously prepared by the above Exercises.

# EXERCISE FOR THE UPPER PART OF THE BODY, TERRE A TERRE.

First Position.—The pupil should lay himself on his back, keeping the body stiff, the arms extended close to the sides, and the legs and heels in the same line. Without moving the heels, he ought very slowly to raise the upper part of the body in a

perpendicular line, and remain seated; then resume his former position without moving the lower extremities.

The same exercise may be performed crossing the arms on the breast, with the palms of the hands on the elbows.

The third exercise is performed with the arms extended above the head, with the fingers clasped. The raising of the body is the same as in the foregoing movement. The arms are brought forward at the same time, and in a line with the shoulders, without separating the hands. The pupil must place himself in the same position as before.

#### LOWER EXTREMITIES.

First Exercise.—The pupil, being placed in the same position as in the exercise of the upper extremities, ought gradually to raise the right leg perpendicularly without moving any other part of the body, and lower it again to the first position by a contrary movement. The same exercise is also performed with the left leg. Both legs are then raised, making the same movement; and when the pupil has acquired sufficient strength in the dorsal region, he should endeavour to raise gently the lower extremities and the back, and touch the ground behind his head with his toes; keeping both arms extended, and resting on the ground, he must return to the first position. Then, by allowing the legs to descend gently, the knees continuing stretched, he remains seated on the ground.

Second Exercise.—The pupil being seated on the ground, the knees bent, the soles of the feet flat against each other, the arms extended, and the lower part of the legs held steadily between his hands, should descend slowly on his back, carrying his legs over his head, and keeping his arms still extended; then, by a slight contrary impulse, he should return to his first position.

Observation.—After having thus far exercised all the muscles of the anterior part of the body, by exercises calculated to give suppleness and strength to them, the pupil must next exercise those of the posterior part, by contrary efforts, which I will proceed to describe.

#### POSTERIOR PART.

First Exercise: Descending and Rising.—The pupil, being placed longitudinally on the ground, with the face downwards, extended, and supported by the strength of the arms and the toes, the hands turned inwards, the fingers pointing towards each other, must allow the body to sink slowly, bending the arms gently and still keeping the body extended, without, however, permitting the belly to rest on the ground, and touch his hands with his lips; then return to the first position very slowly. This exercise should be repeated several times, and very gently.

Second Exercise.—The pupil, being in the same position as in the foregoing exercise, must place the

right hand under the right hip, keeping the left in its place and the ends of the fingers inwards; he must then allow the body to sink towards the ground, gently bending the arms, and keeping the body still extended on the toes, and touch the left hand with the lips; then return to the first position, restoring the right hand to its place. The same exercise must be performed with the left hand.

Observation.—Now that we have called into action all the anterior and posterior muscles, by gradual movements, we shall exert them in a contrary manner, by different exercises practised by means of Chairs.

#### EXERCISES WITH THE CHAIRS.

First Exercise.—The pupil, being placed between two chairs of the same height, each hand on the back of the chair, the seats of which are turned outwards, must rest the whole weight of his body on both wrists, keeping the arms extended, and raise the lower part of the body into a parallel line with the wrists; this position must be preserved for some seconds; he must then allow the inferior extremities to descend gradually, and return to the first position.

Second Exercise.—The pupil, with the hands on the back of the chairs, and supporting the body by the wrists, as in the foregoing exercise, must bend both knees, and descend gently, till the knees almost touch the ground; he must then rise in the same manner, by the assistance of the wrists and shoulders, and return to the first position.

Third Exercise.—The pupil, standing between two chairs, the seats of which are turned inwards, must place a hand on each edge, keeping the thumbs inwards, the knees bent, the feet close together, and the heels raised. He must then raise his body on his wrists, and extend forward the lower extremities, at the same time straightening them, and thus descend gently to the ground; he must rise again, still keeping the lower extremities extended in front, and return to the first position.

Fourth Exercise.—The pupil, being placed between two chairs, the back of one turned in and the other out, with the right hand on the back of one and the left on the seat of the other, must gently raise the lower extremities, and extend them in front; the upper part of the body is to remain perpendicular, and supported on the wrists; he must then raise the lower extremities, bearing the whole weight of the body on the left wrist, and place both legs on the back of the chair by a gentle and regular impulse. He must then return to the first position by the same means, and perform the same exercise on the opposite side.

Fifth Exercise.—The Chair being fixed on the ground, so as not to move, the pupil must place himself behind it, and support both hands on the sides of its back; he must then raise his body on

the wrists, and elevate the lower extremities to a horizontal line; then, allowing his legs to descend, he will return to the first position.

Sixth Exercise.—Two Chairs being placed with the seats turned inwards, the pupil will put his right foot between them, the left knee must be bent towards the ground, both hands fixed on the edges of the seats, and the right knee supporting the body; he must then endeavour to bring his lips to the ground, by extending the left knee and allowing the right to go to the ground; he is to raise himself by a contrary movement, and return to the first position. The same exercise must be performed with the left side.

Seventh Exercise: By means of an Arm Chair.— An Arm Chair being placed in the middle of the room, the pupil must place himself facing the seat, with a hand on each arm of the chair, and raise his body on the wrists, at the same time raising and crossing his legs; he must then pass them forward between his arms, straightening his knees, and carry them over the back of the chair, without touching it. He must then cross them again, and return to the first position. This exercise should be repeated several times.

Observation.—Now that we have given strength to the muscles of the upper part of the body, we shall increase that of the lower extremities by means of the Exercise of the Form.

#### EXERCISE OF THE FORM.

First Exercise.—The pupil must place the toe of his right foot on the edge of the Form, the left must be kept straight, with the knee approaching the right foot, the upper part of the body is to lean forward, the arms are to be extended in a line with the shoulders, and the fists doubled; he must rise gently, and extend the left leg in front; then lower it, still keeping the arms extended, and, by a contrary movement, carry it behind; then, bending the body forward, and keeping the right leg stiff, he must form with it a right line. This exercise must be performed in the same manner with the left leg.

Second Exercise.—The pupil must place himself upright on the Form, with the toes close together on its edge; he must then allow his body to descend gradually, by bending the knees and supporting its weight upon them; his elbows must be kept close to his body, the fore arm extended and the fist doubled; then, rising gently, he must return to the first position. The same movement should be repeated several times.

Third Exercise.—The pupil, being seated across the Form, must fix a hand on each side, and raise his body on his wrists, the knees must be bent, and raised to the height of the hips, the body must lean forward, and in this position he must move along the Form to the end; then make the same movement back again.

#### EXERCISE OF THE WALL.

As I consider the following exercise more difficult than all the others of this species, it would be better, the first time the pupil tries to stretch his legs up the wall, that he should take the precaution of having assistance. The pupil then, having his body extended, with the face downwards, his feet turned with the points of the toes on the ground, and supported against the wall, must carry the hands slowly backwards, one after the other, raising, at the same time, the legs up the wall; he must continue and move thus, till he can touch the wall with the whole upper part of his body; and when he finds himself in a perpendicular line against the wall, the weight of the body supported on the arms, he must bring his head as near the wall as possible, and touch it with his lips. He must then descend gently, as he rose, keeping the knees straight, and the hands moving one after the other, the feet making the same movement. This exercise ought to be performed with great care and precision, on account of the extreme difficulty in the performance of it.

#### EXERCISES WITH THE ROPES.

We shall make use of the Ropes of the Triangle, as an instrument forming a part of the private Gymnastics, in order to perform the nine following Exercises:—

First Exercise.—The rope being fixed to the hook, fastened in the middle of the ceiling of the room where these exercises are performed, the pupil must stand steady, with his feet square, and take hold of the two extremities of it, to which are attached two pieces of wood, four or five inches long, and of a cylindrical form; then, bending the arms, and turning the palms of the hands towards the breast, he must lean forward, allowing the arms to resume their first position, and supporting himself on his toes; he must then turn round, and, by a contrary impulse, return to his place.

Second Exercise.—The pupil, being placed in the same attitude, as in the first exercise, must let his body sink backwards, extending his arms at the same time; then, passing his head under the right arm, and turning round on both heels, he must face about, keeping the body extended and the arms bent; he must then pass his head under the left arm, and return to the first position.

Third Exercise.—The pupil, having hold of the cords, and the legs extended in front, must raise his body, bending the arms as little as possible, and pass the legs extended over the head, bringing the feet

gently to the ground, and then return to the first position, by a contrary effort.

Fourth Exercise.—The pupil, being placed between the two ropes, must take hold of each end; then, keeping his arms half extended, and supporting himself on his wrists, he must raise the lower extremities in a right line, and descend gradually; then return again to the first position.

Fifth Exercise.—The two cylindrical pieces of wood, which are at the ends of the cords, being joined together, the pupil must extend himself on the ground, with the face downwards, supporting the body on the the arms, and catch one of his feet on the wood, between the cords; he must then move backward, by carrying one hand after the other, keeping the foot fixed between the ropes, and the body extended, until he takes, with his mouth, the object placed behind him on the ground. As soon as he has taken the object between his teeth he must return to the first position, by a contrary movement.

Sixth Exercise.—The pupil, being placed between the two cords with the feet in a straight line, must take hold of them as high as possible, extending the arms; then, after raising the body to the wrists, he must bring his knees close to his hands, and continue to bring the body forward, keeping the inferior extremities on a level with the hips; he must then lower them, and return to the first position.

Seventh Exercise.—The pupil, placed between the two cords in the same manner as in the preceding exercise, must raise himself from the ground by the

strength of the arms, pass both legs between the cords, bending the knees, and allow himself to fall gently backwards; then, straightening the knees, he must descend slowly to the ground.

Eighth Exercise.—The pupil, bending his knees, and supporting all the weight of his body on the toes, must hold each end of the cord in his hands, and fall slowly forward, by stretching the knees and bending the arms, without moving the toes from their place; he must then return, and fall backward, extending the arms forward, resting the body on the heels, and allowing the arms to fall naturally to his sides.

Ninth Exercise.—The pupil, placed on the left side of the cords, must grasp them in his hands, the left placed above the head, and the right at the height of the hip; he must raise the body, by bending the left arm and extending the right, at the same time raising the inferior extremities to the left, forming a straight line with the hips. The same exercise must be afterwards performed on the right side, placing the right hand above and the left below.

Observation.—Having described several exercises, calculated to give strength and agility to all the muscles of the body, we will add that of Jumping with the feet steady, and the Leap of the Table; for the purpose of communicating the last degree of suppleness to pupils who perform the above exercises.

#### JUMPING.

Jumping with the feet steady is to be performed in the following manner:—

The pupil must place both heels together, forming a square; he must then bend his body and knees, with the elbows close to the body; then, rising, and extending the arms behind, and inclining the body forward, by means of a strong impulse, he must take a jump, at the same time carrying the arms forward, and descend on the toes, taking care to bend the knees. This must be repeated several times.

#### LEAP OF THE TABLE.

A table, four or five feet wide, being placed in the middle of the room, the pupil must stand seven or eight feet from it, he must then take a run, with the right foot foremost, and, when he comes near the table, he must put his hands on the centre of it, with the right in front and the left behind, by a strong impulse he must then raise his body by the strength of his arms, and jump to the other side of the table, with his feet together, and his knees bent. The pupil must be assisted by some one in the performance of this exercise.

#### EXERCISE OF THE PLANK.

The plank must be placed in a slanting direction, in a corner of the room, with one end fixed to the ground and the other against the wall, in such a manner that the pupil, for the first time, may ascend and descend it easily; this having been repeated several times, the plank must be replaced, almost perpendicularly, and he must endeavour to ascend and descend several times, in the way I am going to describe:—

The pupil must place himself, with his toes against the plank, at the extremity which is fixed to the ground, and a hand on each side on the edges of it. He must advance the right foot and right hand, then the left foot and left hand, then the right foot and right hand, and so on, till he gets to the top of the plank. It must be done so that the feet may come each time between the hands, and prevent him from sliding backwards. We make the pupils perform these exercises, in order that they may obtain the last possible degree of suppleness and agility. They must be repeated several times.

#### EXERCISES OF THE TRIANGLE.

Of all the Gymnastic implements invented by Captain Clias, that of the Triangle, is the one to which we give the preference; because it affords facility in the exercise and development of the muscles in every possible manner.

The Triangle is a movable instrument, supported by means of a hook firmly fixed in the ceiling of a room, from which two ropes are suspended, at the extremities of which a bar is fixed, made of a very dry piece of ash, four feet in length, and an inch and a half in diameter. In order to prevent the cords from twisting, a swivel must be used, so that the Triangle may turn in every direction.

First Exercise: Raising the Body by the strength of the Arms.—The triangle, being fixed to the ceiling in the manner just described, must be raised, so that the pupil is not able to reach it with his hands; he must then stand under it, and, by means of a jump, catch hold of the stick with both hands, and raise himself, by the strength of the arms, as high as possible; then descend again, slowly extending the arms. This exercise should be repeated twice.

Second Exercise: Raising the Body with the Hands turned inwards.—This exercise must be repeated in the same manner as the former, except that the palms of the hands must be turned towards the body.

Third Exercise: Touching with both Shoul-

ders.—The pupil, placed with the left shoulder under the triangle, must take hold of the pole with both hands, and raise that shoulder till it touches the pole; he must then descend slowly, stretching the arms, and perform the same exercise with the right shoulder.

Fourth Exercise: Changing the Legs.—The pupil, placed in the same manner as in the preceding exercise, after having raised his shoulder to the pole of the triangle, must first bring the right leg over it, then the left, and so on, changing the legs alternately several times; he must then return to the ground very slowly.

Fifth Exercise: Touching the Pole with the Knees.—The pupil, placed in the same manner as in the first exercise, must raise his body by the strength of the arms, bringing the knees bent against the pole; he must then descend, repeating the same exercise twice.

Sixth Exercise: Passing the Legs through.— After the pupil has touched the pole with his knees, as in the preceding exercise, he must cross his legs, and pass them between his arms, bringing his knees against his breast, and descend slowly to the ground, backwards.

Seventh Exercise: Returning in the same manner.—The pupil, having passed his legs between his arms, and descended slowly to the ground, as in the preceding exercise, must raise himself by a contrary movement, repassing his legs between his arms,

and bringing the inferior extremities on the bar of the triangle, and descend slowly to the ground, backwards.

Eighth Exercise: Turning the Stick.—The pupil, placed at the triangle in the first position, must pass his legs between his arms, in the same way as described in the sixth exercise; then, by bringing the thighs above the triangle, and taking hold of the cords with both hands, he must assume a sitting position on the pole of the triangle. pupil, being thus seated, must take hold of the right cord with the left hand, and the right hand must be placed on the pole; he must then raise himself by the strength of the arms, turning the pole under him with the right hand, and return to the sitting position. The same exercise is to be performed on the left side. When the pupil has done this exercise, he must descend to the ground, employing the contrary movements.

Ninth Exercise: Descending backwards.— Taking hold of the triangle on the left side, the pupil must raise his body, bringing the right shoulder up to the pole; then elevate the inferior extremities, bringing the thighs above it, and take hold of the end with the right hand, then with the left, and assume a sitting position, holding a rope in each hand. The pupil, being seated, must raise his body by the strength of his arms, carry his legs between the cords, and descend slowly to the ground backwards, leaving hold of the cords at the same time.

Tenth Exercise: Passing the Legs above the Pole.—Being placed at the triangle, the pupil must raise his body, bring the inferior extremities upon the pole, and take hold of the cord as high as possible; then, by the help of both hands, he must assume a sitting position. In that posture he must raise his body, pass his legs over the bar, and descend with the arms extended, still keeping hold of the cord; he must then bring back the inferior extremities over the pole, lay the belly upon it, and, letting go the cord, take hold of the triangle, and descend to the ground.

Eleventh Exercise: Sliding forward.—The pupil, seated on the triangle, in the same manner as in the preceding exercise, with the hands placed at the height of the shoulders, must slide forward, bearing at the same time the elbows outward, and extending the arms, and let the hands slide gently; he must then pass his legs between his arms and descend backwards, with the thighs straight and the body erect; he must then return, laying the belly on the bar; letting go the ropes, and grasping the stick, he must descend slowly to the ground.

Twelfth Exercise: Going backward and returning.—The pupil, being seated on the pole, and holding a cord in each hand, must raise himself by the strength of the arms, pass his legs between the cords, and descend backwards, keeping the thighs extended and the body erect: he must then fall forward, repass the legs between the ropes, and, resting the

belly on the pole, let go the cords, take hold of the bar, and descend gently to the ground.

Thirteenth Exercise: Turning over the Stick.—
The triangle being placed at the height of three feet from the ground, the pupil must take hold of the cords as high as possible, raise the body by the strength of the arms, and bring the feet upon the pole; the body must be kept erect, the hands at the height of the shoulders, then elevate the inferior extremities, pass them between the cords, and place both feet gently on the bar again. When he has done this, he must slide the right hand, from the height of the shoulder to that of the arm-pit, turning the cord backward, and leaving the wrist against the body; then the left must be suffered to slide, taking hold of the cord in the usual way.

Fourteenth Exercise: Returning forward.—The pupil, using the same means as those employed on the preceding exercise, throwing himself backward, as it has been described above, must touch the pole gently with his feet, bearing the body forward, and raise his legs in a horizontal line in front, to the height of the hips, supporting all the weight of the body by the strength of the arms; he must then descend to the ground, extending the inferior extremities.

Fifteenth Exercise: Turning, and returning on the Pole.—The triangle being placed five or six feet from the ground, the pupil must take hold of the ropes as high as possible, and raise himself upright on the pole, placing both legs one after the other, round the cords, and fixing his feet on the bar; he must then slide down, leaving hold of the cords, one hand after the other, and grasp the stick, and pass his arms under his legs. He must do the same exercise again, letting go the cord with the left hand first; as soon as his hands are placed on the bar, he must let go both legs, one after the other, beginning with the right, taking care to keep the hands at a distance from each other, in order that the inferior extremities may pass between the arms, and return with his belly flat on the pole.

Sixteenth Exercise: Turning the Bar, and descending forward.—The pupil, being seated on the bar in the same way as above described, must take hold of the cord, which is on the opposite side, with the left hand, and of the pole with the right, supporting the body with both arms; he must then turn the pole under him, and resume his seat, taking hold of the left cord with the left hand, and of the right with the right hand; then, bearing the elbows forward, he must slide with his arms extended, bringing his belly flat on the pole, and return to the first position. The same movement must be made on the left side.

Seventeenth Exercise: Turning over.—The pole being raised high enough to prevent the feet from touching the ground, the pupil must take hold of one of the extremities with both hands, turning the elbows outwards, and raise himself by the strength of

the arms, until the right shoulder touches the bar; he must then turn his legs above his shoulders, bringing the back part of the body against the pole, the shoulder leaving the triangle; he is then to lower the inferior extremities very slowly, and return with the right shoulder against the bar, keeping the knees extended forward, and the toes forming a parallel line with the head; when he has remained in this position for a short time, he must lower the inferior extremities, holding the right shoulder against the bar, and then descend with his feet to the ground.

Eighteenth Exercise: Parallel Line.—The pupil, placed at one end of the triangle, must take hold of the pole with both hands, and raise his body, leaning his head against the pole; he is then to touch the extremities of the triangle with his toes, by keeping his knees straight, and raising the lower extremities very gently; he must then descend, and repeat this exercise two or three times.

Nineteenth Exercise: Hanging by the Feet.—
The pupil, being placed at the triangle, must raise his body, passing his legs round the sides of the triangle, and catch hold of the cord with the insteps, the toes turning outwards; he must leave hold of the pole, and descend very gently, keeping the body straight; he must then raise himself again, bending the body, take hold of the bar with both hands, repass his legs round the sides, and return, with his belly flat on the pole. The pupil must take care, in performing

this movement, to keep the thighs stretched; it is also necessary that he should be assisted in this exercise, on account of its difficulty.

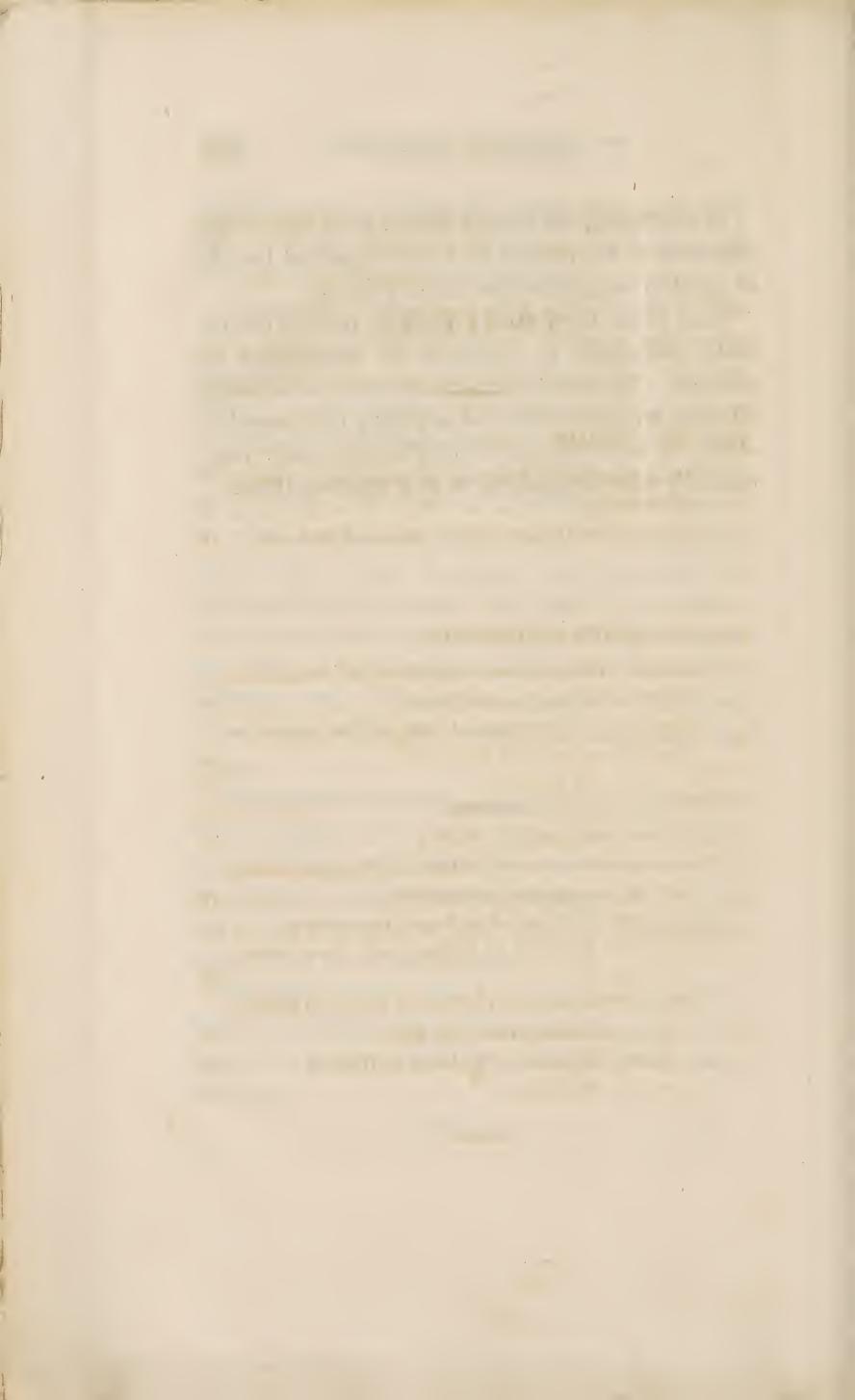
Twentieth Exercise: Flying Course.—The pupil, placed at one end of the triangle, facing the bar, and holding it in his hands, the nails of the left hand turned towards the body, and the elbows stretched, must march forward, crossing the right foot over the left, and keeping the body in a very erect position; as soon as he has learnt this march, he must execute the same course running, going round with a kind of spring; when he is able to perform this flying course with ease, he must take his seat on the bar of the triangle, holding the right rope with the right hand; he must then descend, by the same means by which he ascended. This is all to be done while the triangle is continuing its course.

Twenty-first Exercise: To Balance, Hanging by the Hands.—The pupil, having his hands placed on the triangle, must draw back, the whole length of the cord, and march forward, springing with the feet and raising his body; he must bend and extend his knees, doing the same backward.

The pupil must be careful to raise and lower his body on each side, by the strength of the arms; and, should the triangle be rather short, he must bend his knees.

In conclusion, the Author cannot avoid calling the attention of his readers to a very important branch of physical education—the Art of Fencing.

Next to the Gymnastic Exercises, nothing can be better calculated to communicate gracefulness of carriage. He would, therefore, earnestly recommend all those who are desirous of acquiring that desirable object, to avail themselves of Fencing, either concurrently with Gymnastics, or as a sequel to them.



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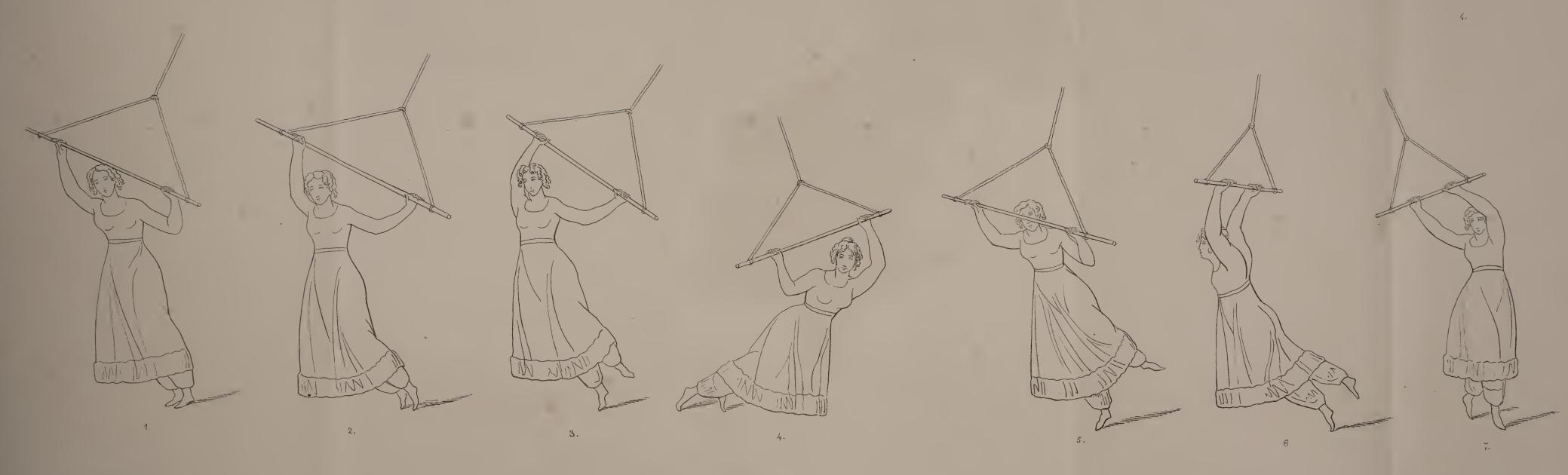




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